DO PROTECTED AREAS SUPPORT CULTURAL SURVIVAL?: EXAMINING THE CHARACTERISTICS OF MODERN PROTECTED AREAS

by

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Abstract

This thesis addresses the question of whether or not today's protected areas, as widespread formal means for nature conservation, are compatible with indigenous cultures. By reviewing case studies of various protected areas on indigenous lands, the thesis examines the degree to which protected areas are influenced by dominant Western culture and discusses the connections between protected area policies and European colonial practices. The study suggests that protected area policies are highly infused with Western-influenced values and norms, and are often imposed upon indigenous societies in the same manner as colonial policies. Today, protected areas on indigenous lands are in greater demand due to increasing public concern over the loss of biological diversity and the growing political significance of environmental issues. However, there is a definite possibility that the expansion of protected areas will further weaken indigenous cultures, thereby posing threats to the world's diverse approaches to conservation that are still found in surviving indigenous communities.

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Acronyms

ACAP	The Annapurna Conservation Area Project
ADMADE	The Administrative Management Design for Game Management Areas
CAMPFIRE	The Communal Areas Management Program for Indigenous Resources
DVNM	The Death Valley National Monument
ICDP	Integrated Conservation-Development Project
IUCN	The International Union for Conservation for Nature and Natural Resources, or World Conservation Union
KMTNC	The King Mahendra Trust for Nature Conservation
LIRDP	The Luangwa Integrated Resource Development Project
MCPA	Miskito Coast Protected Area
MCPT	Miskito Community Protected Territory
NGO	Non-Governmental Organization
UNDP	The United Nations Development Programme
WWF	The World Wide Fund for Nature, or World Wildlife Fund

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Chapter 1: Introduction and Overview of the Thesis

Protected areas have long been widespread formal means for conserving nature and natural resources. Today, the establishment and expansion of protected areas are in greater demand due to increasing public concern over the loss of biological diversity and the growing political significance of environmental issues. The latest World Congress on National Parks and Protected Areas held in Caracas, Venezuela, in 1992, stated that "protected areas are needed in order to safeguard biological diversity in its own right and as an asset for the future" (McNeely, 1993, p. 18). However, protected areas have not always been welcomed by everyone. There have been numerous conflicts between protected areas and indigenous peoples residing near the designated areas. These conflicts are often caused because protected area policies lack cultural sensitivity and fail to acknowledge local people's ways of life (Elliott, 1974; McNeely, 1993; Wells & Brandon, 1992; West & Brechin, 1991).

Consequently, international organizations have begun to seek improved relationships between protected areas and indigenous peoples who practice traditional lifestyles near the boundaries. The World Conservation Union or International Union for Conservation for Nature and Natural Resources (IUCN), the leading international organization on protected-area-related matters, has taken an initiative and, in 1999, issued the Principles and guidelines on indigenous and traditional peoples and protected areas. In the guidelines, the IUCN emphasizes the importance of recognizing "social, economic and cultural interests, values, rights and responsibilities of local communities living in and around protected areas" (World Conservation Union [IUCN], 1999, p. 2). The new

definition of protected areas in the guidelines also expresses the importance of the protection and maintenance of local cultures as follows: a protected area is "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of associated cultural resources, and managed through legal or other effective means" (IUCN, 1999, p. 2).

The IUCN also supports the extended establishment of protected areas on the lands of indigenous peoples. The IUCN accords with the idea that protected areas can defend indigenous communities against commercial exploitation of their lands. Therefore, the guidelines also stated that "formal protected areas can provide a means to recognize and guarantee the [conservation] efforts of many communities of indigenous peoples who have long protected certain areas, such as sacred groves and mountains through their cultures" (IUCN, 1999, p. 2). Many scholars and prominent international organizations such as World Wide Fund For Nature (WWF) agree with this IUCN position. The WWF belief is that "the establishment of protected areas which are based on partnerships among indigenous peoples, governments, and the global conservation community can both foster effective conservation and support indigenous sovereignty, land rights, and self-determination" (Stevens, 1997, p. 265).

My question is whether indigenous cultural survival is possible when the cultures meet the dominant Western culture through the establishment of protected areas. Today's protected areas, which I call modern protected areas, have their conceptual roots in Western society and are likely to carry Western culture and values with them. The establishment of those modern protected areas on the lands of indigenous cultures may, therefore, result in the domination of Western over non-Western culture. As history tells

us, when two cultures meet, it is often the dominant one which takes over the other, resulting in a loss for the less dominant culture (Wilmer, 1993). What is the difference between the introduction of the colonizing culture to former colonies and the introduction of modern protected areas to lands where indigenous peoples live? Does modern protected area establishment on those lands not mean "sweeping-away" diverse indigenous cultures?

The purpose of this thesis is to address the question of whether or not modern protected areas support the survival of indigenous cultures. By reviewing case studies of various protected areas on indigenous lands, the thesis will examine the degree to which protected areas are influenced by dominant Western culture, and investigate the similarities between the introduction of modern protected areas and European colonial policies. These examinations will serve not only to avoid further destruction of indigenous peoples but also to prevent diverse conservation approaches from disappearing.

Conserving diversity in conservation approaches is an important task because diversity can provide different perspectives on things people take for granted otherwise. Today, an increasing number of people have started to question the environmental sustainability of approaches based on the Western norm of "progress" or "growth," seeking a different way for humans to live in harmony with the natural environment (O'Connor, 1994, p. 2). Indigenous peoples' ways of life, characterized as having a strong tie to their lands, may provide industrialized societies with useful insights into how to co-exist with nature.

This thesis will consist of eight chapters. In chapter 2, I will look at the characteristics of both indigenous and dominant Western cultures, and the process of Western expansion in the international arena which resulted in the marginalization of indigenous peoples and cultures. The chapter will discuss how and why some peoples have been marginalized in the international political and economic arena, and note that the cultural survival of indigenous peoples is today under severe pressure. Based upon the discussion of indigenous and Western cultures, four questions are derived which are used to analyze the extent to which modern protected areas are influenced by Western values and societies. The four questions are as follows:

1. Do protected area policies reflect the conceptual separation between humans and nature?
2. What is the role of science – natural and social – in protected area policies?
3. How are protected areas governed?
4. How are protected areas promoted?

Chapter 3 will examine the characteristics of early modern protected areas using the four themes. This examination will investigate the degree to which early modern protected areas were influenced by Western ideas. Moreover, by investigating the ways modern protected areas spread around the world, the chapter will examine the dominance of Western societies over decisions of whether or not to create protected areas.

It will be shown in chapter 4 that early modern protected areas created a variety of negative effects on indigenous cultures due to the coercive imposition of Western values and ideas. Also discussed is the process whereby modern protected area policies have

gradually evolved towards recognizing non-Western cultures and the importance of local involvement in protected area management.

In the fifth chapter, I will analyze, with the four themes, a well-recognized model in today's modern protected areas, called the Integrated Conservation-Development Project (ICDP). This mode of conservation promotes local involvement in protected area management, supposedly enhancing both indigenous peoples' well-being and the natural environment's health within protected areas. However, a close examination of ICDPs will prove that they do not essentially differ from earlier modern protected areas.

Chapter 6 will make a connection between ICDPs and a strategy called indirect rule, which colonial powers used to assimilate non-Western peoples. The same four themes will also be used to compare these two different types of policies. Similarities between ICDPs and indirect rule will suggest possible Westernization of indigenous cultures as a result of the widespread implementation of ICDPs.

In chapter 7, I will examine an indigenous-ruled protected area and discuss how its fundamental characteristics are different from those of modern protected areas. I will then focus on the essential aspects of the indigenous-ruled protected area, and conclude the thesis by suggesting key ways to create protected areas that will serve not only people in the West but also non-Western peoples.

Finally, in chapter 8, I will conclude that today's protected areas retain Western values. Therefore, there is a great possibility that the expansion of protected areas leads to a loss of the world's diverse approaches to conservation. I hope that this analysis will provide a chance to reconsider the validity of modern protected areas to both Western-influenced conservationists and indigenous peoples. Foreseeing the outcomes of an event

is very challenging. However, the rapidly disappearing natural environment and cultural diversity in today's world requires a critical approach to monitor current practices in conserving both cultural and biological diversity.

Chapter 2: Western Expansion and Marginalized Cultures

In 1800, at the beginning of the Industrial Revolution, approximately half the world was controlled by relatively autonomous and largely self-sufficient groups of indigenous peoples. Today, they represent only four percent of the global population. These peoples and their diverse cultures have gradually eroded due to their lack of political power (Bodley, 1994, p. 289; Dodson, 1994; Geohring, 1993, p. 6). In contrast to this marginalization of indigenous cultures, Western culture defined below has extended its control over wider areas of the world and built its solid status as today's dominant culture.

The focus of this chapter will be the investigation of the relationships between Western culture and other less-dominant cultures since 1800. The analysis of modern protected areas on indigenous lands requires the examination of power relationships between cultures through history because it will help to predict impacts modern protected areas may have on indigenous cultures. This chapter will first identify the characteristics of both indigenous and Western cultures, and second will examine power relationships between these cultures. At the end of the chapter, four themes will be identified from literature, and these themes will be used to guide the analysis.

Indigenous Peoples and Their Contribution to Biological Diversity

There are no commonly accepted definitions of who indigenous peoples are. The literal sense of the term implies that indigenous peoples are those who lived in a given area for a long time. Indeed, some of the definitions emphasize that indigenous peoples

are the original or oldest surviving inhabitants in an area (IUCN, 1997, pp. 27-29; Stevens, 1997, pp. 19-20). Others stress self-identification as the fundamental criterion for determining who indigenous peoples are. An indigenous group considers itself to be culturally distinct from other peoples and recognizes this difference by a common history, a common geographical location, linguistic ties, religious or ideological ties, and a common economic base (Colchester, 1997, pp. 101-102). Moreover, included in most of the definitions is that their distinct cultures – drawn from their strong tie to the land – are vulnerable to outside intervention by dominant cultural groups (Bodley, 1994, p. 364; Colchester, 1997, p. 101; IUCN, 1997, pp. 27-29; Thompson, 1987, p. 13).

In this thesis, the term indigenous peoples will be used to apply to those who are politically non-dominant and vulnerable to being disadvantaged by the development process that dominant groups pursue, yet maintaining a sense of themselves as a people, which is based on shared language, history, values, customs, and land-based economy. Some indigenous groups might have already acculturated to the dominant society to a certain degree. Others might have large populations with greater political power. However, this thesis will not focus upon these exceptions because of the overwhelming difficulties of clearly establishing an irrefutable definition or categorization of human societies.

Today, there are approximately 250 million indigenous peoples in the world, and they are distributed in more than eighty-five countries. In total, they represent about four percent of the global population. However, it is also this four percent who help to create the world's cultural diversity. The world contains 5,000 to 8,000 different cultures, seventy to ninety-five percent of which belong to those indigenous societies (Goehring,

1993, p. 6; IUCN, 1997, p. 30; Nietschmann, 1994, p. 225; Stevens, 1997, p. 19). This cultural diversity of indigenous groups also contributes to global biological diversity. The places populated by indigenous peoples are often characterized by biological richness and healthy landscapes, suggesting "an inextricable link between biological and cultural diversity" (IUCN, 1997, p. 30).

This link between biological diversity and indigenous lands is not a coincidence. Indigenous peoples have evolved lifestyles and cultures adapted to sustaining the natural environment and conserving biological diversity. Indigenous peoples' lifestyles are often based on shared spiritual beliefs and conservation ethics that reflect a perception of people as a part of the community of all life forms. These cultural values promote obligation to, as well as respect and care for nature. Indigenous peoples are so closely tied to the land that their cultures contain considerable knowledge of local geography and ecosystems, which contributes to the conservation of biological diversity (Apffel-Marglin, 1996, p. 9; Berkes, 1999, p. 21; Callicott, 1982, p. 294; Donson, 1994, p. 21; Johnson, 1992, pp. 7-8; Nietschmann, 1994, p. 241; Stevens, 1997, p. 2). Although it should not be romanticized that all indigenous peoples are conservationists, awareness of this limited generalization must not undermine their considerable achievements in nature protection. Their knowledge, experience, and moral and emotional commitment to nature conservation have significantly contributed to preserving biological diversity.

Some new environmentalism recognizes that the loss of indigenous cultures is likely to cause the loss of biological diversity, and suggests that the best ways to protect the world's natural environment is to support indigenous rights and their territories (Dasmann, 1991, p. 10; Nietschmann, 1994, p. 241; Stevens, 1997, p. 3). However,

against this notion, the survival of many indigenous peoples has been severely threatened. One example of a threat to their survival is the way that indigenous cultures have been submerged into political systems of the dominant Western culture. This results in the susceptibility of indigenous cultures to acculturation.

Dominant, Western Culture

The dominant culture of the world today is Western culture. The term "Western" does not refer to a unified place; the West emerges only in opposition to other cultures, such as that of subsistence farmers in South Asia or indigenous peoples (Apffel-Marglin, 1996, p. 34). Today, this Western culture continues to replace other cultures, becoming even more dominant. Where does this Western culture originate? Why is it so dominant? The following section will examine the origin of Western culture.

Western culture has its roots in the modern idea of progress. Indeed, in the Western/Westernized world, this modern idea of progress, which can also be called modernization or development, has been the key to change – personal, economic, institutional, and political (Norgaard, 1994, p. 49). What is this modern idea of progress? In Norgaard's (1994, p. 49) words, progress is an "uplifting sense of both material and moral destiny." Bury (1932, p. 173) cites from Mercier de la Rivière (1767) that progress for people in the eighteenth century consisted of the greatest possible abundance of objects suitable to their enjoyment and of the greatest liberty to profit by them. In 1949, US President Harry Truman stated that progress consisted "principally in helping the free peoples of the world, through their own efforts, to produce more food, more clothing, more materials for housing and more mechanical power to lighten their burdens" (Sachs,

1992, p. 177). People's freedom and material abundance have been the key words of progress, and Western culture has been built upon this concept.

Many argue that the modern idea of progress was developed during the Renaissance when historians, philosophers and scientists began to question what was then a conventional wisdom (Ayres, 1998; Cowen & Shenton, 1995; Norgaard, 1994; Sachs, 1992). As with many other cultures, Western culture before the Renaissance saw the earth as a living organism and nurturing mother serving as a constraint restricting the actions of humans (Merchant, 1992, p. 43). This cultural belief system made people believe that they had little control over their destiny, and floods, droughts, and plagues were considered to be acts of God (Norgaard, 1994, p. 51). The Renaissance provided the initial template to a new idea that humans could control the earth and their destiny, and developed a new worldview that required a drastic change in human-nature relationship. It despiritualized the earth and separated humans from nature (Apffel-Marglin, 1996; Ayres, 1998; Norgaard, 1994). Nature became something to be observed, analyzed, and reasoned by humans. Reasoned nature has come to be controlled and used for human prospect. It was this idea of control that opened a path toward freedom and material abundance attained by humans. Humans were expected to emancipate themselves from the bounds of nature and to act following their free will, while remaining dependent on nature was considered unwise (Sachs, 1992, p. 178; see also Cowen & Shenton, 1995, p. 31).

Modern natural science was developed to do the job of reasoning and controlling. Advances in science and scientific technology have meant humans' increased mastery over nature and growth in humans' freedom and material abundance, whereas the

occurrence of misery has been viewed as a matter of scientific inadequacy (Norgaard, 1994, p. 51). As well, human society began to be controlled. Social science has sought to observe, analyze, and explain rationally human societies in order to facilitate the better control of human life. Despiritualized and scientifically controlled earth and nature have given autonomy to humans assuring unlimited progress in their lives (Cowen & Shenton, 1995, p. 31; Norgaard, 1994, p. 1; Sbert, 1992, p. 200).

In critiques of modern beliefs in progress, modernism, or development, Norgaard (1994) and others identify the characteristics of Western norms and values. These characteristics are summarized in the following four points:

1. Separation of humans from nature
2. Faith in science
3. Belief in technocracy
4. Belief in the universality of the above values

First, Western ideas have become based on the separation of the human mind from nature, and nature has become something to be observed (objectivism), controlled, and used by humans. Second, people have become faithful to a purely intellectual, mathematical, and scientific knowledge. Knowledge has been "liberated of all moral constraint and ethical context" (Sbert, 1992, p. 200). Values and facts have been distinguished from each other (positivism). Moreover, the understanding of complex phenomena has been reached by reducing the complexities to some separate, simple elements (reductionism). This has resulted in separate sciences – physics, chemistry, biology, applied sciences such as agriculture, engineering, and forestry, and social sciences such as economics – which lead to an answer to complex problems (Johnson,

1992, p. 12; Norgaard, 1994, p. 6). Third, faith in progress through sciences has promoted technocratic governance in Western societies. Experts in sciences have been considered the only problem solvers. This line of thought has led to centralized technocracies in which benevolent and efficient technocratic governments promote and disseminate science and technology (Norgaard, 1994, p. 51; Sbert, 1992, p. 200). Finally, the notion of progress or Western culture is characterized by the belief that cultural differences will fade away as people discover the effectiveness of rational Western culture. The Industrial Revolution and subsequent successes of Western science and political reorganization in Europe and North America during the past three centuries began to confirm the promise of progress. An increasing number of people were declaring that Western culture should be the collective culture that all would ascribe to (Blaut, 1993, pp. 14-17; Bodley, 1990, pp. 11-15; Norgaard, 1994, p. 1).

Exporting Western culture worldwide has been positively viewed in the West. People in the Western societies believed that non-Western cultures were incapable of progress because the latter lacked Western knowledge of rationality and science. Therefore, they concluded that Western people could help others to progress by diffusing innovative ideas from the West. Although the diffusion of Western ideas to other cultures has led to the destruction of non-Western peoples' knowledge and ways of life, the diffusion has been accepted as an altruistic deed (Blaut, 1993, pp. 15-16; Bodley, 1994, p. 282; Wilmer, 1993, pp. 7-8).

This justification of Western-style progress has been repeatedly made until the twentieth century. For example, the notion of developmentalism suggests that "all states are autonomous entities that proceed along parallel paths but from different starting times

and at different speeds" (Taylor, 1993, pp. 146-147). The paths are, in Van Valkenburg's biological analogies, described as "four stages of development – youth, adolescence, maturity and old age" (Taylor, 1993, p. 146). This notion of developmentalism is obviously based on the assumption that all societies want to strive toward Western-style progress. Various notions and theories, such as developmentalism, have assured the idea of progress and propelled the West to transfer their culture to the rest of the world.

Western Expansion and Marginalized Indigenous Cultures

At the beginning of the Industrial Revolution, indigenous peoples in various areas of the world still retained considerable autonomy. However, over the next 150 years, many of them were conquered by European colonial powers and incorporated into the Western political and economic systems (Bodley, 1994, pp. 288-289). As discussed in the earlier section, the denial of indigenous peoples' way of life was supported by the notion of progress calling for all peoples to be incorporated into a universal European or Western capitalistic industrial culture (Blaut, 1993, pp. 14-17; Bodley, 1990, pp. 11-15).

However, this process of incorporation was accompanied by catastrophic events such as the genocide of indigenous populations and the dispossession of their lands. For example, upon founding a colony of Southwest Africa in 1884, German soldiers massacred indigenous groups in this arid region, forcing them to surrender their best lands to German settlers and to withdraw to waterless reserves (Bodley, 1990, p. 52). In addition, massive depopulation of some peoples resulted from epidemic diseases introduced by Europeans (Blaut, 1993, p. 184; Goehring, 1993, p. 19; Bodley, 1994, p.

289). Dispossessed and demographically disrupted indigenous peoples were then submerged into colonial systems.

European social norms rationalized and justified all the destructive actions in their colonies. One of these norms was the legal doctrine of *terra nullius*. The doctrine taught that some lands belonged to no one. This fiction effectively nullified the land rights of the traditional inhabitants and allowed colonizers to remove indigenous peoples from their lands (Dodson, 1994, p. 21). Racist ideologies were also used to justify the disadvantaged position of indigenous peoples. Social Darwinism, applying Charles Darwin's natural selection to human cultures, also played a significant role in the rationalization of colonial actions. Social Darwinists argued that "the peoples and cultures destroyed by colonialists were culturally and biologically 'unfit' and therefore doomed to disappear" (Bodley, 1994, p. 411). With the help of such norms and theories, violence against indigenous groups continued and seriously threatened their survival.

Subsequent to military victories, Europeans initiated the exploitation of indigenous peoples and lands through legal means. The demographic damage to indigenous peoples allowed colonizers to easily enforce their political will and to replace the original political and economic systems with European systems (Blaut, 1993, p. 184-186). By whatever means necessary, agreements were made and treaties were signed with indigenous peoples that surrendered full and final authority for their lives to the external government. Indigenous peoples lost their political autonomy. This loss of political autonomy fostered the destruction of indigenous economies because colonizers forced local populations to participate in the market economy as wage labourers or cash croppers. Once initiated, their involvement in the market economy was often self-

reinforcing because wage laboring and cash cropping left little time for subsistence activities (Bodley, 1994, p. 290).

As European powers dismantled their overseas empires, the independence of former colonies ended the practice of European control. However, indigenous peoples were once again subjected to the control of aliens, European-influenced elites within the newly formed state boundaries. The new independent states were outgrowths of European kingdoms, having centralized political systems with one set of institutions and laws within the boundaries. In addition, the states typically legitimized one language, one economy, one flag, and sometimes one religion. These centralized systems were imposed on what had often been diverse sets of pre-existing indigenous peoples, turning their territories into "internal colonies"[1] (Bodley, 1994, p. 365; Nietschmann, 1994, p. 227; Wilmer, 1993, pp. 8-9). The marginalization of indigenous cultures continuously occurred through centralized political systems that were authorized firstly by European powers and later by European-influenced elites within new state boundaries.

Throughout the European colonial and inter-colonial period, large numbers of indigenous societies were forced to give up their autonomy, being incorporated into alien centralized political and economic systems. Many of those indigenous peoples were also removed from their ancestral lands, and, since indigenous peoples' cultural identities are built upon their lands, the breakdown of the tie to their lands often led to the loss of their identities as peoples (Anti-Slavery International, 1997, p. 19; Goehring, 1993, p. 2). Moreover, lack of political power among indigenous peoples resulted in the abandonment

[1] Internal colony is "a territory within a state containing an indigenous population that is denied the right of self-determination" (Bodley, 1994, p. 381).

of their customary law, political institutions, and local economic systems, which were key components of their cultures (Memmi, 1991, p. 92; Dodson, 1994, p. 22).

Themes of the Thesis

The question addressed in this thesis is whether the survival of indigenous cultures is possible when modern protected areas are established on indigenous lands. As discussed in this chapter, Western belief in progress led to the extension of Western political and economic systems, thereby resulting in the marginalization of indigenous cultures. Is there any difference between the introduction of the colonizing culture to former colonies and the introduction of modern protected areas to lands where indigenous peoples live? The following chapters will examine modern protected area policies and will compare them with colonial policies. The concentration of the discussion will be whether or not modern protected area policies are Western-influenced, and how the policies are implemented. The serious damage to indigenous societies from colonial practices suggests that if protected area policies are Western-oriented and forcibly imposed on indigenous societies, there is a great chance of eroding indigenous cultures by the establishment of protected areas. Moreover, this loss of indigenous cultures may also lead to the loss of biological diversity, which modern protected areas have meant to prevent.

The examination of modern protected areas will be pursued using four themes as an analytical tool. These themes are drawn out of the characteristics of Western norms and values suggested by Norgaard (1994) and others, as laid out in the earlier section of this chapter. These themes will be used to examine the degree to which modern protected

areas are influenced by Western culture, and also to investigate whose interests are reflected in the establishment of protected areas. The following are the four questions which will be used as analytical themes:

1. Do protected area policies reflect the conceptual separation between humans and nature?
2. What is the role of science – natural and social – in protected area policies?
3. How are protected areas governed?
4. How are protected areas promoted?

Critical analyses of modern protected area policies are also found in the literature. For example, Pimbert and Pretty (1997) examined the conventional approaches of protected areas through fourteen categories and sought a way that protected area policies could be improved. Many have also analyzed the level of indigenous peoples' involvement in protected area management and suggested the enhancement in indigenous participation (Stevens, 1997; Wells & Brandon, 1992; West & Brechin, 1991). This thesis will contribute to these analyses by adding to them the comparison between protected area practices and colonial approaches, thereby revealing a broader picture of the threats that protected areas can pose. Moreover, this construction of the wider picture will help to predict unseen problems that modern protected areas may cause in the future and will, hopefully, find an answer to how protected area policies could be improved.

Chapter 3: Characteristics of Early Modern Protected Areas

A growing effort to protect some small remnant of the earth's natural heritage has led to establishment of modern protected areas, such as national parks and wildlife reserves, often on indigenous lands. Many consider Yosemite Park and Yellowstone National Park, both established in the second half of the nineteenth century, as the origin of today's protected areas (Allin, 1990, p. 6; Heinen, 1995, p. 554; Nash, 1982, p. 350; Runte, 1987, p. 1; Stevens, 1997, p. 28). Some natural areas in different parts of the world, such as sacred groves of South Asia, have a longer history of protection. However, what makes today's protected areas different from those traditional ones is that the new concept was born out of Western industrialized civilization (Allin, 1990, p. 5; Guha, 1996, p. 110; Nash, 1982, p. 350). In this thesis, in contrast to traditional protected areas like sacred groves, these new type of protected areas will be called "modern protected areas."

As part of the endeavor to understand the relationships between modern protected areas and indigenous cultures, this chapter will go back to the birth of modern protected areas and investigate where the protected area concept originates. This will reveal the characteristics of modern protected areas which will be useful for the further analysis related to indigenous issues concerning modern protected areas. As a tool for the examination, the chapter will use the four themes identified in the previous chapter. These four themes are as follows:

1. Did early modern protected area policies reflect the conceptual separation between humans and nature?
2. What was the role of science – natural and social – in early modern protected area policies?
3. How were early modern protected areas governed?
4. How were early modern protected areas promoted?

Human-Nature Relationships in Early Modern Protected Areas

The first modern protected areas were born in Western societies in the eighteenth century when nature was used as a resource or commodity for industrial production. As discussed in the previous chapter, nature became a resource for human use after the Renaissance. The modern Western rational thinking disengaged the human mind from nature, and put nature under human control. Untamed nature, a dangerous threat to civilization, became something to be tamed and utilized for human prosperity (Apffel-Marglin, 1996, p. 10; Callicott, 1982, p. 293). Industrialization, urbanization, and wealth were the outcome of controlling and using nature as a resource to serve humans.

However, advanced industrialization and urbanization created a new notion of romanticism, which saw human civilization as flawed and unfulfilling. Towards the middle of the nineteenth century, as industrialization and urbanization expanded, people noticed, and began to fear, rapidly diminishing natural landscapes. The response was to set aside some natural areas and kept them "unspoiled" by human civilization (Colchester, 1997, pp. 98-99; Nash, 1982, p. 343). The nature preservationists argued that nature was necessary for human survival because only nature could accommodate

humans' spiritual needs (Nash, 1982, p. 347). This romanticism put a new value on nature as a refuge from the ills of civilization and something to be preserved for the recreation of human spirit (Bunce, 1994, p. 26-27; Colchester, 1997, p. 98; Neumann, 1998, p. 16). Modern protected areas were born out of this romantic nature preservation movement. Protected areas came to provide natural space for humans to fulfil their spiritual needs.

Modern protected areas also satisfied other kinds of human needs. During the nineteenth century, intellectuals in the United States were suffering from the embarrassment of a lack of recognized cultural achievements, and were looking for "a visible symbol of continuity and stability in the new nation" (Runte, 1987, p. 11). Unlike established European countries, which traced their origins far back into antiquity, the United States lacked a long artistic and literary heritage. Neither did it have physical reminders of the human past such as castles, ancient ruins, or cathedrals occupying the landscape. Americans sought their visible symbol of cultural identity in nature. As a result, they chose their distinctive natural scenery as a monumental symbol of their culture (monumentalism). Modern protected areas were used to publicize natural scenery as American cultural symbols (Frome et al., 1990, p. 416; Runte, 1990, p. 15).

The combination of two new values about nature, namely recreational value and monumental value, led to the creation of American national parks (Runte,1990, pp. 15-21; Nash, 1982, pp. 350-351). Distinctive natural features of early parks such as Yosemite Park and Yellowstone National Park satisfied both humans' recreational needs and the country's need for a cultural identity symbol. In 1864, Yosemite Park, administrated under the California State, was created for "public use, resort, and

recreation" (Runte, 1990, p. 19). In 1872, the first national park, Yellowstone National Park was reserved as "a public park or pleasuring ground for the benefit and enjoyment of the people" (Allin, 1990, p. 7).

The birth of modern protected areas was based on the idea of separating humans from nature. The notion of romanticism placed human civilization and nature at opposite ends of the spectrum, enhancing nature's alienation from humans. Reflecting this notion, nature in modern protected areas was kept isolated as much as possible from human activities. This approach is in marked contrast to those of indigenous peoples who have strong ties to their lands (see chapter 2). It is also noteworthy that nature in modern protected areas was a resource or commodity for human use. As discussed earlier, considering nature as a resource is already based on the idea of human-nature separation. With monumentalism, nature was given equal value to European cultural symbols such as castles and cathedrals, as if nature had been humans' possession. The idea that nature belongs to humans is also based on the separation of the human mind from nature (see chapter 2).

The examination above shows that the first modern protected areas were end products of nature's alienation from humans. Therefore, early modern protected areas were infused with Western ideas in this manner. The following section will look into how science, as Western rationality, influenced early modern protected areas.

Role of Science in Early Modern Protected Areas

What kind of roles did Western science – natural and social – play in the establishment of the first protected areas? Firstly, this section will discuss natural science

approaches observed in resource management of early modern protected areas. Secondly, it will examine the role of social science, especially economics, at the time of the creation of early modern protected areas.

Western scientific reasoning provided the way to manage natural resources in early modern protected areas. This occurred despite the fact that conservation science was barely in its infancy. The observers (objectivism) tried to measure (positivism) and understand the situation mathematically by simplifying systems and variables (reductionism).[2] The following section will look at Yosemite's natural resource management in its early era, which demonstrates Western scientific characteristics such as objectivism, positivism, and reductionism.

When Yosemite Park was first built, actual natural resource management in the park was not of great importance. Rather, promotion or publicizing of Yosemite's natural features was the main interest because the park was to satisfy Americans' recreational needs and to become a cultural symbol. However, the expansion of tourism inside the park called for attention to the need for natural resource management to halt visible environmental degradation, such as soil erosion and the disappearance of game and birds (Runte, 1990, p. 57).

Yosemite's natural resource management schemes that would arrest and prevent soil erosion and the disappearance of game and birds were developed from Western natural science. Scientists observed, measured, and simplified the environmental phenomena to be understood. After the observation, the scientists concluded that the

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[2] Johnson (1992, pp. 12-13) describes these three characteristics as follows: "objectivism is the belief that the observer must deliberately separate oneself from the being observed; positivism is the belief that what is scientifically real is measurable; and reductionism is the understanding of complex phenomena by breaking down data and reassembling it in different ways."

domesticated sheep, scattered and grazed on mountain slopes, created all the problems; the sheep caused soil erosion by trampling the soil, reduced the population of wild animals by separating the herds of those animals, and negatively affected birds' habitat by disturbing their nests. The sheep received all the blame and were removed from the park boundaries as a result (Runte, 1990, pp. 60-61). In fact, it was unrealistic to explain environmental change on the basis of a single species' attributes, but the scientists' observation placed importance on the "wild" animals over "tamed" sheep.

Economics as social science also played a major role in establishing modern protected areas. Under the Western system, governments required that protected areas be rationalized economically. Therefore, it was very important to prove their economic contribution to society. By the nineteenth century, human wealth had become measured by the improvement in individual material well-being. The goal of industrial societies was to achieve greater material abundance, resulting in more satisfaction among the population (Bury, 1932, p. 173; Gowdy, 1998). Governments pursued greater amounts of raw material input, technological advancement, higher labour productivity, and higher per capita income (Deléage, 1994, p. 44). Nature was, for the governments, something to manipulate to achieve greater industrial or agricultural efficiency (Runte, 1987, p. 71).

For American advocates of the first modern protected area, convincing the governments was not an easy job. They needed to prove that establishing a park did not impede the country's economic growth. In order to persuade the governments, park advocates emphasized economic worthlessness in the areas. Forty square miles of Yosemite Park was hardly large enough to jeopardize the country's economy. Besides, the park was so high and so rugged that it already appeared to be valueless. Therefore, in

Yosemite's case, scenic preservation could be allowed to have priority over economic goals because the land in question seemed worthless (Runte, 1987, p. 49).

However, proving the economic worthlessness of Yellowstone was more challenging since the area extended over a vast space. One approach to this problem was to demonstrate how tourism might generate more revenue than would be achieved by exploiting the limited resources of the parks. Switzerland at that time regarded its scenery as a money-producing asset to the extent of some two hundred million dollars annually. Park initiators, therefore, approached railway companies, which seemed to give some support for the preservationists' cause. Fortunately for the preservationists, the railway companies were very committed to boosting tourism and supported protected area establishment (Runte, 1987, p. 61, 1990, p. 45). The nature preservationists successfully convinced the governments to establish protected areas by bringing up the idea that tourism would be a potential money-maker (Runte, 1987, p. 91). Without this economic justification, those modern protected areas might have not been created. Both natural and social sciences were thus influential in the establishment and management of early modern protected areas.

Governing System of Early Modern Protected Areas

Chapter 2 discussed that Western faith in sciences promoted technocratic-governing systems because experts in sciences were supposed to be responsible for the most efficient social systems to support human prosperity (Norgaard, 1994). The following section will look at the relationship between economic rationality, derived from Western social science, and highly centralized decision-making systems in early modern

protected areas.

Western economic rationality defined by social scientists has created top-down social organizations. Following the legitimation of "self-interest" by Mandeville, Locke, and many others, Western societies came to value the ability to reason, and rational individuals are expected to promote their autonomy and self-interest. An individual is assumed to act on economic rationality, being acquisitive, competitive, calculating, and materialistic (O'Connor, 1994, p. 1; Gowdy, 1998, p. xvi). In such societies, where individuals pursue their self-interest, the higher authority's intervention becomes important. The public domain, separated from the private, has to be ruled by laws that regulate individuals' private activities (Smith, 1999, p. 55).

Runte (1987) and Sellars (1997) point out the link between this Western economic rationale and the reason for Yosemite Park becoming a government-owned park. Around the time when Yosemite Park was established, distinctive scenery sites were gradually being lost into private ownership and commercial development. Niagara Falls is one of those sites where hotels, cabins, shops, and signboards were built, competing for public attention (Runte, 1987, p. 15; Sellars, 1997, p. 17). Among the preservationists, the fear of losing the Yosemite Valley to such individual economic gains was prevalent. Indeed, some entrepreneurs had already claimed portions of the valley in anticipation of the thousands of visitors. Under the western rational rule, the solution to the preservationists' fear was to give the government authority to control the area as a public domain (Runte, 1987, p. 28). As discussed in the section above, the preservationists did not deny the potential tourism development in protected areas; however, they wanted the sites to be owned by the government rather than private owners. In a society where an

individual's economic self-interest pursuit is justified and approved, only the enforcement of regulations by an authority could save the natural environment or landmarks from being taken up by individuals and lost into commercial tools.

Promotion of Early Modern Protected Areas

Modern protected areas, first developed and implemented in Western societies, soon spread to non-Western societies. Chapter 2 discussed that the Western idea of progress was characterized by its universalizing effect. Western domination in the political arena enabled modern protected areas as well to spread widely. In the following section, the process of modern protected area penetration will be observed, dividing it into three stages: the late nineteenth century, the early twentieth century, and post-World War II. This examination is significant as it will show that Western societies always took the initiative in establishing protected areas throughout the different eras.

Late Nineteenth Century in Former British Colonies

The modern protected area movement was not a phenomenon observed only in America. In the late 1800s in the former British colonies such as Canada, New Zealand and Australia, a growing trend toward establishing modern protected areas was prevalent. The trend was started among European administrators and scientists who settled in those colonies. While the types of landscapes dedicated for parks and reserves varied from one country to another, the purpose of parks and reserves as scenic preservation for public recreation was ubiquitous (Eidsvik & Henwood, 1990; Devlin et al., 1990; Mosley, 1990).

Canada, being located next to the United States, quickly adopted the American idea and established its first national park in Banff in 1885. The area was protected from sale, settlement, or exploitation, for the purpose of tourism development and public recreation (Eidsvik & Henwood, 1990, p. 62). New Zealand gazetted some mountain peaks in 1894 as their first national park. Later, many scenic reserves were added under the 1903 Scenery Preservation Act (Devlin et al., 1990, p. 276). Australia's first national park establishment was as early as that of the United States; in 1872, Mt. Eliza was set aside for public recreation (Mosley,1990, p. 37).

Early Twentieth Century in Africa

Following numerous reports about rapid reductions of specific wildlife species in Europe and their colonies in the late nineteenth century, the conservation of African wildlife species became a major concern among Europeans (Allin, 1990, p. 9; Nash, 1982, pp. 352-353; Tucker, 1991, p. 41). As a result, the first European effort to stop African wildlife depletion appeared as an English-inspired international convention in 1890, where seven European nations signed draft articles concerning nature protection in Africa, proposing regulations on hunting licenses, closed seasons, and methods of capture. These new regulations were remarkably strict and comprehensive and too unrealistic to be implemented (Nash, 1982, pp. 354-355). A variety of meetings concerning international nature protection continued to be held in Europe in the 1910s and 1920s. However, most of the resolutions from the meetings did not work effectively. One of the reasons was international tension about World War I, and the other was lack of enforcement for the resolutions (Nash, 1982, p. 360). Meanwhile, the numbers of

wildlife in Africa continued to drop.

Consequently, Europeans came to realize the limit of their conventional wildlife conservation practices and were in search of a new approach. It was in the early twentieth century when they began to pay attention to American national park ideas, where natural landscapes and wildlife were protected for people to watch and experience, instead of maintaining them simply for shooting. Closed to hunting, the American national park reflected the attitude that moose, bear, and buffalo were more valuable as life forms than as targets. National parks seemed to have more potential in African nature protection than sweeping and unenforceable resolutions. The Sabi Game Reserve in South Africa and Albert National Park in the Belgian Congo were the first of those examples (Nash, 1982, pp. 355-356).

Europe's great interest in wildlife protection led to the London Conference for African Fauna and Flora in 1933, where representatives of all the colonial powers in Africa gathered and promoted stricter protection of wildlife. They expressed a determination to increase the number of national parks, and what were termed "strict natural reserves" (Nash, 1982, p. 360). By this point, national parks had gained a solid status as a wildlife protection strategy, and their popularity grew over time (Burnett, 1990, p. 236; Roth & Dupuy, 1990, p. 466).

Post-World War II in Newly Independent Countries

Following the end of World War II, increased environmental concerns among Europeans led to greater interests in creating modern protected areas around the world. However, the political independence of former European colonies made the task more

complicated because Europeans could no longer coerce sovereign countries to establish parks or reserves. As a result, Europeans chose to take more subtle approaches to encourage those sovereign countries to create protected areas. These included political pressures from western-dominated international organizations, financial aid tied to protected areas, and sponsored education programs in developing countries. These techniques turned out to be very successful and played a significant role in driving protected area promotion (O'Neill, 1996, p. 521; Nash, 1982, p. 361).

The end of World War II also gave rise to the movement for international unity, which provided a favorable situation for the growth of co-operative global nature protection (Nash, 1982, p. 361). A series of international conferences were held for the purpose of promoting international cooperation in nature protection. The first post-war conference was in Fontainebleau in France in 1948, and the participants agreed on the enhancement of international nature protection effort. The new institution created at this conference, the International Union for Conservation of Nature and Natural Resources or IUCN began to undertake the task of keeping an up-to-date United Nations List of National Parks and Equivalent Reserves (Allin,1990, p. 10).

During the colonial era, European powers were able to impose the creation of a variety of parks and reserves on their colonies. However, following the end of the era, those colonial powers had to struggle to keep protected areas in their former colonies as they were. Parks and reserves built during the colonial era were the Europeans' playgrounds for their spiritual and psychological needs. The creation of the parks and reserves was also to protect the areas from the locals. Indeed, the local population simply ignored the parks and reserves, and most of the local administrators did not care about

them (Nash, 1982, p. 367). For this reason, the prospect of giving sovereignty to the native governments frightened European preservationists. Some subtle means were employed to persuade the former colonies to keep their protected areas.

One of the means was political pressure. The First World Conference on National Parks in 1962 endeavoured to make countries proud of having national parks and protecting rare species. This was done by issuing the United Nations List of National Parks and Equivalent Reserves and listing threatened birds, animals and later, plants in the Red Data Book (Nash, 1982, p. 367). An outcome of this listing was that having national parks almost seemed a condition for being a respected civilized society. Since most newly independent countries desired international recognition and respect, this strategy was very effective (Nash, 1982, p. 368). International political pressure allowed colonial powers to successfully transfer a sense of responsibility for nature protection to the new leaders in recently independent countries.

The availability of foreign assistance provided an important incentive for the governments of the former colonies or developing countries to create more parks and other protected areas. In the 1970s and 1980s, many international organizations, such as the Food and Agriculture Organization of the United Nations, the United Nations Development Programme (UNDP), the United States Agency for International Development, IUCN, and WWF provided substantial financial and technical assistance for the management of protected areas. Since these programs generally offered additional project allowances, offices, housing and transport facilities (Ghimire, 1994, p. 200; Thompson et al., 1986, p. 22), the establishment of national parks sometimes became a means for developing countries to enhance their development.

In the 1980s, another type of financial aid, called debt-for-nature-swaps, enhanced the establishment of protected areas in developing countries. Under the debt-for-nature-swaps, developing countries that create protected areas will receive help in paying their debt from developed countries (Klinger, 1994, p. 237). For example, in 1982, an American non-governmental organization, Conservation International made an agreement with the Bolivian government, and promised to cover $650,000 of its debt payments; in return, the Bolivian government established a protected area along the Amazon. In the following year, the Nature Conservation and WWF-US contracted with Costa Rica and agreed to pay a part of its debt in order for Costa Rica to create a protected area. In the same way, Ecuador and the Philippines established protected areas in the 1980s (Ishi, 1990, p. 58).

As a part of the global economic system, developing countries had to acquire hard currencies. As a result, many developing countries adopted parks and reserves on their own, frequently being convinced that park and reserve maintenance encourages tourism, which brings hard currencies into the countries (Allin, 1990, p. 9). This use of protected areas as tourist attractions sometimes changed the local attitude toward protected areas drastically. In the 1950s, Kenyan students were taught in the classes that "national parks and game reserves were white men's toys, symbols of hated colonialism;" however, in 1974, a Kenyan schoolboy wrote, "I would like the almighty God to bless our wild animals to increase more abundantly so that the affinity of tourists for our prospering country is increased" (Nash, 1982, p. 372).

Western-sponsored education programs were another important key to a successful transfer of leadership in nature protection. Western countries funded

education in wildlife management for people in whose hands the destiny of wildlife would be placed. The United States, for example, financed education abroad for training new leaders in former colonies in nature preservation methods. The National Park Service of the United States annually offered programs which took park leaders from seventy countries on both field and classroom exploration of the national park idea (Nash, 1982, p. 370). Foreign-supported colleges for wildlife management were also built in developing countries (Nash, 1982, p. 369). In some African countries, a variety of projects, such as film presentations, essay contests and trips to national parks, were organized, intended to interest the children and general population in wildlife conservation (Nash,1982, p. 369).

Modern Protected Areas as a Western Product

Western norms, values and interests have been responsible for how early modern protected areas were started, managed, and promoted. First, the unique Western attitude towards nature, such as nature-as-a-resource, romanticism and monumentalism, led to the development of the modern protected area concept. Second, Western science played a major role in managing early protected areas. Nature in protected areas was managed by scientists using Western scientific approaches. The justification of modern protected areas was based on Western economic norms; modern protected areas were established when they seemed to contribute to capitalistic economic development such as capital accumulation through tourism. Third, the decision-making systems in early modern protected areas were also developed within the Western rationale. The higher authority, such as the central government, was in charge of protected area management because, in

Western societies, the technocratic higher authority was considered to provide the most efficient way of social management. Finally, modern protected areas as a Western product spread to other parts of the world. Western societies encouraged other parts of the world to establish modern protected areas. While the reasons for establishment varied from recreational purposes to wildlife conservation, Western interests and values played significant roles in the promotion of modern protected areas.

Modern protected areas were a product of Western societies because the idea and organization of modern protected areas were based on Western norms and values. Moreover, Western political domination over non-Western regions made it possible to spread this Western product to the rest of the world. The history of early modern protected area development is bound up with the history of Western industrial countries' involvement in natural resource conservation in non-Western regions, that is, Western political dominance over others' resources. In the previous chapter, it was discussed that the expansion of European political control through colonization was rationalized by a variety of Western norms, such as the notion of progress, the legal doctrine of *terra nullius*, and Social Darwinism. The penetration of early modern protected areas in non-Western regions carried on this process.

Chapter 4: Problems Created by Early Modern Protected Areas

The spread of early modern protected areas to non-Western regions had a variety of negative impacts on indigenous peoples and natural environments. These impacts resulted from those early protected areas placing Western assumptions on indigenous communities, while the values and systems in the latter were/are significantly different from the ones in the West. As a result of facing difficulties meeting their goal of nature protection, modern protected area policies began to evolve. This chapter will discuss the problems created by the establishment of modern protected areas in indigenous communities, and the evolution of protected area policies thereafter. These problems include the violation of the human rights of local inhabitants and the environmental degradation of the areas.

Wilderness in Protected Areas

The ills of industrialization and urbanization inspired romanticism, leading to the belief that "there is an inverse relationship between human presence and the well-being of the natural environment" (Berkes, 1999, p. 153). As a result, the protection of "wilderness" – "pristine environments similar to those that existed before human interference" – became important (Gómez-Pompa & Kaus, 1992, p. 271). Having this notion of wilderness central to the nature management approach, many of the early modern protected areas prohibited any human activities within their boundaries. The goal of most protected areas was to maintain as near a wilderness state as possible by avoiding any human interference (Bachmann, 1988, p. 58). Indeed, the First World

Conference on National Parks in 1962 requested that all the natural resource exploitation by humans such as dam construction, mining, farming, herding, hunting, fishing, gathering, felling trees and even collecting medicinal herbs be excluded from national parks, the primary type of modern protected area at the time (Harroy, 1969, p. 22; Stevens, 1997, p. 31).[3]

Devastation among Local Indigenous Populations

In order to avoid or minimize human activities for wilderness preservation, the establishment of early modern protected areas often involved the displacement of inhabitants or severe restrictions on local land use. Local populations in and around protected areas experienced a variety of hardships. One of the most tragic results of the forced displacement by the establishment of modern protected areas has been the death of relocated people from exposure to new climates and diseases. When Lake Rara National Park was established in Nepal in the late 1970s, two villages inside the park were relocated, and the inhabitants, who were used to a harsh mountain climate, were moved to southern lowlands, where many died of malaria (Kharel, 1997, p. 127; Stevens, 1997, p. 32). In the same way, the expulsion of the Phoka from Malawi's Nyika National Park, on a high plateau of 2100m to 2600m altitude, to a lower area also caused the villagers to perish from malaria (Brechin et al., 1991, p. 13; Hough, 1991, p. 276).

Another tragedy is created when indigenous people can no longer keep their

[3] In 1978, IUCN first recognized types of protected areas that were not based on strict nature preservation. Today, the category of National Park, one of the six protected area categories, requires the exclusion of "exploitation or occupation inimical to the purpose of designation of the area." Out of the six categories, the category of National Park restricts the extraction of natural resources from designated areas to the second highest degree (Stevens, 1997, p. 17, 38).

traditional way of life after being displaced from their homelands. For example, when Kidepo National Park was established in Uganda, a tribal group of the Ik was forced into a small plot on the border of their homeland, where they were unable to keep their lifestyle as hunters and gatherers. They were not allowed to travel into the park to obtain their needs either. Instead, they were encouraged to herd and farm on dry mountain slopes. What waited for them at the resettlement area was a variety of social problems and severe starvation. The shift from a mobile hunter-gatherer way of life to a sedentary farming way of life disintegrated the Ik's beliefs, habits, and traditions. Since collaborative hunts were stopped, there no longer existed communal effort among the Ik. When drought came, solitary hunting – poaching – became a necessity for their sheer survival. However, the collapse of their traditional social system no longer allowed the Ik to share the harvest. Starvation hit the Ik as a result. Furthermore, they were suddenly crowded together, and the frequency of contact became far greater than ever before. As a result, the whole band came to live in mutual hostility (Turnbull, 1972).

Those who kept their traditional lifestyle by residing near the protected area boundaries could not always avoid suffering. The denial or limitation of access to subsistence resources inside protected area boundaries often severely undermined their well-being and sometimes led them to starvation. For example, the Nepalese government forced the resettlement of 22,000 inhabitants in 1964 in order to create a wildlife sanctuary, which subsequently became Royal Chitwan National Park, the country's first national park (Stevens,1997, p. 32). The residents had been practicing agro-pastoralism around the park area since the 1950s, after malaria eradication programs had made the area habitable. The park's policy of banning any resource use inside the park boundaries

created difficulties among the residents. Many of the communities close to the park lacked fuelwood and grazing land. These agro-pastoralists had used the park area to collect fuelwood, graze livestock, and collect tall grasses for construction; therefore, the sudden denial of access to the park area led them to economic insecurity. Large mammals, such as the one-horned Asian rhinoceros and the Bengal tiger protected in the park, also became a major threat to the people, causing human injury and death, as well as damage to crops and livestock (Wells & Brandon, 1992, p. 85).

Some peoples were allowed to live inside protected areas; however, because of the prohibition of their traditional life styles, they became severely depressed. For example, when the Death Valley National Monument (DVNM) was established in 1933, a native American tribe, the Timbisha Shoshones were living inside the new monument's boundaries. They were not removed, but they were forced to give up their traditional hunting life. The National Park Service wanted Death Valley to be an uninhabited area, and the Timbisha Shoshones' presence inside the area disrupted this notion. Due to the political climate in the 1930s, which defended natives' rights, the Timbisha Shoshones were allowed to stay inside the park, but were pushed into an Indian reservation inside DVNM. The National Park Service banned certain tribal practices, including traditional hunting and gathering, and regulated the number of Indian-owned domestic animals (Crum, 1998, p. 118). The end of their traditional way of living had enormous negative psychological impacts on the Timbisha Shoshones, especially since hunting activity was at the core of their society (Crum, 1998, p. 127).

In pursuit of nature conservation goals, Western policy-makers developed early modern protected areas which jeopardized local peoples residing in and near the

boundaries. When they are relocated, some of those peoples perished from diseases to which they had little immunity. Some local societies stopped functioning when the establishment of protected areas ended their traditional practices. Severe restrictions on access to lands forced peoples to face starvation and poverty. Early modern protected area policies were as imperialistic as European colonial policies, neglecting local peoples' needs and rights.

Conflicts and Further Environmental Degradation

As McNeely (1995) points out, staff in many modern protected areas often believe that strict law enforcement, such as the imposition of heavy fines and imprisonment for illegal exploitation, is the best option for long-term conservation. However, those strict measures did not necessarily stop local indigenous peoples from illegal exploitation. The extraction of natural resources in protected areas is vital to basic needs supply for local populations. Since local inhabitants' basic survival needs are constant, harder restrictions on the exploitation of natural resources will only result in more "thefts" by locals (Ghimire, 1994, p. 199).

Moreover, resentment among indigenous populations to strict measures in protected areas sometimes led to unnecessary environmental degradation. Enforcement created hostility and armed clashes between protected area personnel and local inhabitants, not only resulting in loss of life on both sides but also encouraging illegal activities by indigenous populations (Ghimire, 1994, p. 203; Raval, 1991, p. 70; Stevens, 1997, p. 32; Wells & Brandon, 1992, p. 87). For example, in India and Thailand, the escalation of those clashes led some local people to deliberately set fire to the forest, as it

was a means for them to defy the higher authority's control over forest use (Colchester, 1997, p. 108; Gadgil & Guha, 1993, p. 170; Ghimire, 1994, p. 204). Moreover, wild animals under protection were sometimes poisoned by local villagers who resented those wild animals' attacks on their cattle. As a result, the populations of some endangered animals declined (Ghimire, 1994, p. 204; Raval, 1991, pp. 75-76).

The strict enforcement of regulations was obviously not an effective means of natural resource management within protected areas. It not only failed to avert the illegal use of protected area resources, but also led to unnecessary environmental degradation in the area. These experiences in early modern protected areas required the development of measures attempting to minimize conflicts. Consequently, the importance of recognizing the needs of local populations came to be addressed (Wells & Brandon, 1992, p. ix).

Humans as a Part of Ecosystems

In the 1960s, the notion of wilderness as well as the assumption that the protection of nature can only be achieved by excluding human activities began to be challenged (McCabe et al., 1992, p. 353; Gómez-Pompa & Kaus, 1992, p. 3). Some scientific research proved that a periodic collection of forest products or a certain level of wild animal hunting is not only unlikely to undermine conservation efforts but may also sometimes even enhance conservation (Ghimire, 1994, p. 224). There were also some findings that grazing of cattle does not necessarily create problems for the health of wildlife habitat (Raval, 1991, p. 74). Gradually, a new idea that human activities on the land also play a role in the ecosystem, began to be accepted.

This view that humans are a part of the ecosystem led to the acceptance of some resource extraction by local peoples within protected area boundaries although, in many

cases, the peoples continued to face a great degree of inconvenience. In Nepal, as early as the mid-1970s, national park planning recognized people's welfare inside the parks (Stevens, 1997, p. 67). Royal Chitwan National Park, after not allowing any resource extraction inside the boundaries, later changed its policy to permit villagers to collect tall grasses for house construction and thatching from the park once a year. This grass cutting is not considered detrimental to wildlife because it is permitted only at the end of the growing season when most plant material is dead, of poor nutritional quality, and unattractive as food for wildlife. This grass cutting stimulated the economy and contributed to better welfare of the people in the region. However, locals are still allowed neither to take fuelwood nor to graze their animals inside the park. Overall, the park still imposes considerable hardship on local communities (Wells & Brandon, 1992, p. 86).

Nepal's Langtang National Park and Sagarmatha National Park, both established in 1976, allowed inhabitants to live and keep their traditional agro-pastoral activities inside the park boundaries. The park authorities did not close any areas to grazing and did not control livestock numbers and herding patterns. However, allowing settlements inside parks created new problems among the residents. In Langtang National Park, agricultural crops have often been damaged by increasing numbers of wildlife, which has become a serious problem for many villages (Kharel, 1997, pp. 127-130). Residents in Sagarmatha National Park also have been allowed to farm and have cattle; however, their severely-limited access to the forests has been creating a great inconvenience among residents because much more time and trouble have to be expended to gather adequate amounts of fuelwood (Stevens, 1997, p. 81).

Human Rights Considered

The 1970s brought growing awareness of indigenous rights issues in international politics. In the early 1970s, the United Nations authorized a detailed study of discrimination against indigenous populations, which later provided information, definitions, and recommendations for indigenous rights issues (Native American Council of New York City, 1994, pp. 10-11; Thompson, 1987, p. 7; Venne, 1998, pp. 50-51). Moreover, in 1975 the International Court of Justice took the first step by delegitimizing the notion of *terra nullius* and emphasizing the sovereignty of indigenous peoples over their territories (Thompson, 1987, pp. 7-8; Venne, 1998, p. 45).

This trend in international politics also influenced protected area policies. Nature conservationists required the development of approaches that lessened negative impacts on local inhabitants and contributed to the welfare of indigenous populations. Indeed, as early as 1975, IUCN discussed indigenous issues and passed a resolution calling on governments to recognize the value and importance of traditional ways of life in indigenous communities (Colchester, 1997, p. 116; Stevens, 1997, p. 38). Subsequently, in 1978, IUCN revised its categorization of protected areas, and created some new categories that allowed human settlement and the use of natural resources within designated areas (Stevens, 1997, p. 38).

Acknowledging Local Knowledge

Complete reliance on Western science in natural resource management often leads to Western scientific imperialism in modern protected areas. For example, in Western Samoa's case, prior to the establishment of a protected area, a team of American

scientists conducted a biological survey of the islands. It was those American scientists who would thus tell the Samoans what species occurred where, and which areas were therefore most important for conservation (Dasmann, 1991, p. 10). The establishment of protected areas has usually been preceded by Western scientific research.

Giving Western science sole legitimacy has meant the neglect of local ecological knowledge. Consequently, natural resource management in modern protected areas has failed to benefit from local inhabitants' knowledge of local geography, ecology, and land management. Indeed, in some situations, protected areas cause negative ecological or conservation consequences due to the administrators' lack of knowledge about the local ecosystem. In Israel, after establishing Gilboa Nature Reserve, the populations of protected target species actually decreased. Later, a more careful observation came to the conclusion that the local practice of thinning trees after they have reached a height of three to four meters, combined with domestic animal grazing and browsing, increases species diversity (Rabinovitch-Vin, 1991, p. 99). The lack of understanding of local ecological balances by outsiders very possibly leads to further environmental degradation. The limits of Western science have slowly been recognized and addressed.

Promotion of Local Support

Forced relocation and strict restrictions on land use at the establishment of early modern protected areas led to devastation among indigenous peoples especially as they had strong ties to their lands. Later, the acceptance of the norm that human land-based activities are not necessarily a threat to the natural environment began to allow some indigenous subsistence activities within the protected area boundaries. However, the

highly centralized nature of resource management in protected areas failed to meet local needs and left dissatisfaction among local populations. A lack of options and frustration among local inhabitants often resulted in the neglect of protected area regulations and further environmental degradation. Furthermore, natural resource management solely dependent upon Western science sometimes caused negative ecological consequences. Early modern protected area policies failed to meet both indigenous peoples' needs and their conservation goals because they neglected cultural and environmental aspects important to local communities.

In rural development programs, local involvement in projects became important in the 1970s due to the disenchantment with large-scale, top-down, development programs which were popular in the 1960s but which often failed to bring wealth to the rural poor (Little, 1994, pp. 350-351). Protected area policy-makers, who saw failure in their approaches jeopardizing local peoples and degrading natural environments, also began to recognize the importance of local involvement. The focus of protected area projects then shifted toward how to obtain local support, satisfying local needs and promoting local participation in conservation (Barrett & Arcese, 1995; Brandon & Wells, 1992).

Chapter 5: Integrated Conservation-Development Projects in Modern Protected Areas

In response to the understanding that local support is indispensable for meeting conservation goals in modern protected areas, Integrated Conservation-Development Projects (ICDPs) have been launched and practiced widely in today's protected areas on indigenous lands. While the core objective of these projects is protected area conservation, the projects aim to gain local support for conservation by providing economic development and political empowerment to the communities (Barrett & Arcese, 1995, p. 1073; Brandon & Wells, 1992, p. 557; Gibson & Marks, 1995, p. 941).

This chapter will focus on some of the ICDPs found in protected areas in sub-Saharan Africa and Nepal. Those ICDPs examined are generally considered successful because they have promoted local development and participation in indigenous communities. This is also the reason why those ICDPs are chosen to be discussed. However, this chapter intends to re-evaluate their success thoroughly. The analytical tool for this evaluation will be the four themes, which were also used to analyze early modern protected areas in chapter 3. This analysis will allow for a comparison of ICDPs with early modern protected area approaches, and investigate what has been and what has not been changed in modern protected area policies.

What is ICDP?

The strategy of ICDPs for better conservation in protected areas is to link three major components of rural development: conservation, economic development and political empowerment. It has been assumed that, in the past, modern protected areas

failed in conservation because the policies neglected local economic and political needs, and created conflicts between local peoples and protected area authorities. As a result, the new ICDP concept has been developed (Brandon &Wells, 1992, p. 557).

In exchange for local peoples' support in conservation, ICDPs provide local communities with economic goods such as alternative income sources, employment opportunities, better infrastructure, new technology and better social services. ICDPs also promote local political involvement in decision-making on conservation and economic development issues. This local political empowerment and the creation of economic incentives among local populations are intended to promoted local stewardship and enhanced preservation of natural resources (Barrett & Arcese, 1995, p. 1073; Brandon & Wells, 1992, p. 557; Gibson & Marks, 1995, p. 941). ICDPs employ local peoples as workers and volunteers. This approach aims at the mitigation of suspicion and distrust among local people toward ICDPs, letting those local employees act as community mobilizers (Wells & Brandon, 1992, p. 44).

ICDPs in Sub-Saharan Africa

ICDPs in sub-Saharan Africa are designed to promote wildlife conservation among local populations, by combining local socio-economic development with conservation efforts. They are found in protected areas, such as national parks and wildlife reserves, as well as areas adjacent to protected areas. One of those projects, the Communal Areas Management Program for Indigenous Resources (CAMPFIRE) in Zimbabwe, has been considered successful and played a leading role as an effective wildlife conservation approach in the region. Zambia's Administrative Management

Design for Game Management Areas (ADMADE) and the Luangwa Integrated Resource Development Project (LIRDP) are also such examples, although the two latter projects are not considered as successful as CAMPFIRE.

Sub-Saharan Africa provided a rich habitat for many wildlife species; however, in the 1970s and 1980s, the numbers of wildlife species began to decline due to increased poaching by locals. Decreasing commodity export prices, increasing international demand for wildlife products, and inflation encouraged wildlife poaching. Conservationists were concerned about these startling decreases in the wildlife populations, and tried to stop locals from poaching. The governments have had conservation areas created in the region where the wildlife resource was controlled with a top-down approach. Hunting quotas were set, and hunting permits were required. The enforcement of such regulations was often done by military-trained wildlife scouts. The consequence of this approach was similar to what other early protected areas experienced; not only did the policies create conflicts between conservationists and local populations, but they also failed to reduce poaching (Gibson & Marks, 1995, p. 941; Wainwright & Wehrmeyer, 1998, p. 933).

In order to change the situation, both Zimbabwean and Zambian governments searched for an alternative wildlife management model. Poverty in local communities and a lack of communication between the managers and locals were considered problematic in managing protected areas. The insufficiency of income and food in the region obliged local people to take wildlife from the protected areas for food and cash. A lack of decision-making involvement by local people created their antagonistic attitudes toward the protected areas. The ICDP concept was developed from workshops and

discussions organized by the governments and/or international conservation agencies. The new concept assumed that the alleviation of poverty through local economic development and local people's direct involvement in management would change poachers into conservationists (Gibson & Marks, 1995, p. 941; Lungu, 1990, p. 116; Murindagomo, 1990, p. 124; Wainwright & Wehrmeyer, 1998, p. 933).

The ADMADE, LIRDP, and CAMPFIRE programs were put into practice in 1985, 1988, and 1989, respectively (see Table 1). While ADMADE and LIRDP attempted to provide local communities with new employment opportunities, alternative income sources, infrastructure development, and some decision-making powers, CAMPFIRE focused on the assured inflow of wildlife revenue and the devolution of resource management decision-making power into the local communities (Lungu, 1990, p. 116; Murindagomo, 1990, p. 124).

CAMPFIRE's main focus has been to make sure that revenues created by sustainable wildlife use in the areas go back into the communities. Examples of such wildlife use are tourism, safari hunting, and meat sales. Local people are said to react positively to these initiatives because they receive tangible benefit in cash and because they come to realize the long-term benefits of healthy wildlife populations as a result of their abilities to generate revenues from wildlife resources (Barrett & Arcese, 1995, p. 1074; Derman, 1995, p. 202; Matzke & Nabane, 1996, p. 66). CAMPFIRE has also been aiming at the devolution of resource management decision-making power to local communities because it is thought that "the ability to collectively make decisions creates an incentive for collective action to preserve the benefit-producing resource base" (Matzke & Nabane, 1996, p. 74).

Table 1. Benefits Provided by ICDPs

Project	Economic Benefits			Political Benefits
	New Income New Resource Use	New Employment	New Infrastructure New Technology	Local Decision-Making
CAMPFIRE **(Zimbabwe)**	- safari concession fees - hunting licenses - culling operations and selling of the meat - fishing	- wildlife scouts - tourist guide	- grinding mills - rural health centers - school - houses for teachers - wells - roads	- some financial decision-making (revenue allocation etc.) - legal authority at District level
ADMADE **(Zambia)**	- safari concession fees - hunting licenses - culling operations and selling of the meat	- wildlife scouts	- grinding mills - rural health centers - school - houses for teachers - wells - roads - bridges (local communities receive 35% of the revenue to spend on community development)	- creation of locally-based Sub Authority - some financial decision-making - no legal authority
LIRDP **(Zambia)**	- wildlife sport hunting by tourists - fishing - agriculture	- wildlife scouts	- road construction - grinding mills - storage shed	- no financial decision-making - no legal authority
ACAP **(Nepal)**	- limited natural resource use in conservation area - tourism service industry	- tourism lodge - tourist guide - porter - handicrafts	- nursery management - plantation - soil and water conservation - wildlife management - micro-hydro electrification - low wattage cooker - solar energy - kerosene and liquid petroleum gas depot - agricultural development	- some community-based resource management - some financial decision-making - no legal authority

Note. The information is collected from: Barrett & Arcese, 1995; Gibson & Marks, 1995; Heinen & Mehta, 1999; Matzke & Nabane, 1996; Stevens, 1997; Wainwright & Wehrmeyer, 1998; Wells, 1994; Wells & Brandon, 1992.

Zimbabwe's Guruve District is one of the first areas that adopted CAMPFIRE, and has made significant achievements at some of the communities. These communities have been receiving direct income from wildlife use, and been granted the decision-making independence on how to use the revenues. This has successfully motivated local people to support the project's conservation initiatives (Derman, 1995, p. 209; Gibson & Marks, 1995; Matzke & Nabane, 1996, pp. 82-82; Metcalfe, 1994, pp. 179-181). However, this does not mean that local villagers have retained full decision-making power. Legal authority on resource management has only devolved onto the District level of government, and the Department of National Parks and Wildlife Management has remained responsible for approving resource management decisions, such as hunting quotas (Barrett & Arcese, 1995, p. 1075; Derman, 1995, p. 207; Matzke & Nabane, 1996, pp. 67-68).

Despite its imperfect transfer of decision-making power to the local communities, CAMPFIRE, especially in the case of Guruve District, has been receiving wide international recognition as an innovative approach to successful wildlife conservation. The appraisal is derived from the fact that the project enabled residents to link economic benefits with their wildlife resource conservation, which resulted in transforming "the source of poachers" into "a bastion of support for wildlife protection and enhancement" (Matzke & Nabane, 1996, p. 80). CAMPFIRE's achievement has been inspiring other conservation initiatives.

Both ADMADE and LIRDP have been taking an approach of giving the local population incentives to conserve wildlife by providing them with better economic opportunities and local infrastructure development. The economic benefits offered local

people include new employment opportunities such as village scouts, grinding mill operators or builders, and tourist guides. As infrastructure development, the projects have built maize grinding mills, storage sheds, health clinics, schools, teachers' houses, water wells, roads and bridges. Controlled wildlife resource use has been permitted, resulting in the communities earning some income from hunting fees and gaining benefit from the meat of safari-killed game or from the sales of meat from culling operations. LIRDP has also been keen on agricultural extension, and fishery development in order to provide local communities with alternative food sources. Fishing has indeed become increasingly popular as an alternative food-generating activity (Gibson & Marks, 1995, p. 944; Wainwright & Wehrmeyer, 1998, p. 934; Wells & Brandon, 1992, p. 561).

Despite the variety of local development that the projects initiated, the communities have so far been unsure of the projects' impacts on local economy. According to Marks and Gibson (1995), most rural residents at ADMADE sites said that they have experienced little economic benefit through ADMADE. At LIRDP sites, more than half of the residents responded that they had not increased their living standard through the project's activities. It is thought that the main reasons for these local reactions are the ineffective inflow of money into the communities and skewed distribution of economic benefits (Gibson & Marks, 1995, p. 947; Wainwright & Wehrmeyer, 1998, p. 937). For example, only a few per cent of the gross profits from sport hunting reached rural communities, and in some cases the project's fund was used only to pay scout salaries, not for local development. In addition, most of the economic benefits from the project were often shared among chiefs' families and friends. It has been observed that the local populations have not made a clear linkage between economic

benefits and conservation because they have not received enough economic gain through the projects (Marks & Gibson, 1995, p. 953; Wainwright & Wehrmeyer, 1998, pp. 936-937).

In regard to decision-making, neither LIRDP nor ADMADE has so far been very active. ADMADE created Wildlife Management Sub-Authorities, which are to represent local residents; however, ADMADE has been in control of the project's bank account and has the ability to veto the Sub-Authority's choices for development projects. Decision-making powers on natural resource use, such as hunting regulations, quotas, licenses or fees are also under the control of ADMADE (Gibson & Marks, 1995, pp. 946-948). At LIRDP sites, mechanisms for local participation in decision-making are still under construction, and further, misappropriation of funds and lack of consultation with the local communities have been prevalent (Wainwright & Wehrmeyer, 1998, pp. 938-939).

Despite the ineffectiveness prevalent in both ADMADE and LIRDP, it is observed that illegal hunting of certain wildlife species has been reduced. However, the reason for this reduction is not the local communities' support for the projects but the increased law enforcement by wildlife scouts, which has been leading to an antagonistic relationship between locals and the scouts. Gibson and Marks' observation (1995) in the ADMADE site is that local hunters have only switched their tactics by concentrating on small prey, and have continued to kill game at high rates. LIRDP and ADMADE have not been as successful as CAMPFIRE. Many believe that the failures of the two projects are due to ineffective economic benefit provision to the communities, inadequate transfer of decision-making power to the local level, and therefore the unclear linkage of nature

conservation and economic/political benefits among local population (Gibson & Marks, 1995, p. 952; Wainwright & Wehrmeyer, 1998, p. 938; Wells & Brandon, 1992, p. 563).

ICDPs in Nepal

Nepal designed a new type of protected area in the mid-1980s. It is called "Conservation Area," and it combines nature protection with local development. Projects in Conservation Areas take a similar approach to ICDPs in Sub-Saharan Africa; local development and participation are encouraged in order to gain local support for conservation initiatives. The first such project, the Annapurna Conservation Area Project (ACAP), started in the Annapurna Conservation Area in 1986, has been considered very successful in promoting conservation, economic development, and political empowerment in the local community (see Table 1). This positive outcome resulted in the creation of two new conservation areas in the Makalu-Barun and Kanchenjunga regions (Brandon & Wells, 1992, p. 559; Heinen & Mehta, 1999, p. 21).

In many of the remote mountainous areas in Nepal, tourism development has been promoted on a large scale during the last two decades. Over years, tourism-related activities have become an important income source to the local economies. However, tourism development has also led to serious environmental problems. Forests have been cleared to provide fuel for cooking and heat for visitors. Expanding agriculture, water pollution, poor sanitation and litter on trekking routes have all increased. Safeguarding the natural environment while keeping tourism operational has become the focus of national and international conservation groups (Brandon & Wells, 1992, p. 559; Stevens, 1997, p. 243).

Conventional conservation programs in remote mountainous areas in Nepal, however, have often failed because they focused mainly on strict regulations and external enforcement regarding the use of natural resources. These efforts not only created conflicts between the protected area authorities and the local population but also resulted in continuous illegal collection of natural resources from protected areas. The importance of local involvement in conservation planning then came to be emphasized (Stevens, 1997, p. 80-85; Weber, 1991, p. 210-212).

The King Mahendra Trust for Nature Conservation (KMTNC), the country's leading conservation non-governmental organization (NGO), developed ACAP as an alternative conservation approach. The project aims to reduce negative environmental impacts from tourists, while increasing the local economic benefits from tourism and promoting local participation in conservation (Brandon & Wells, 1992, p. 557). The ACAP has accepted a zoning system which divides the conservation area into zones and specifies how each zone should be used. While having a strict preservation zone, intensive land use by locals is legalized in another zone (Brandon & Wells, 1992, p. 559; Bunting et al., 1991, p. 168; Stevens, 1997, p. 249). Considering local people's basic economic and social needs, in the intensive use zone, ACAP has allowed locals to hunt, collect forest products, exploit the area's potential for tourism, and develop service industries for tourism such as farms, orchards, poultry breeding and handicrafts. At the same time, ACAP has introduced alternative sources of energy, principally hydroelectricity, as a substitute for fuelwood, and promoted conservation education, reforestation, improved cook stoves and agricultural development in local communities. As well, conduct guidelines for tourists have been developed. Although the significant

economic benefits from tourism have not been distributed widely, the project has made great progress in motivating a skeptical local population to participate in conservation initiatives (Bunting et al., 1991, p. 171; Stevens, 1997, pp. 258-259).

In regard to local decision-making, ACAP established a headquarters in the intensive use zone, primarily staffed by local Nepalis, and also started community development, forest management, conservation education, and research and training activities. As for the forest management, ACAP has helped the local traditional forest management committee to revive and be responsible for enforcing regulations, fining poachers and controlling timber cutting (Brandon & Wells, 1992, p. 559; Stevens, 1997, p. 251).

However, the ultimate authority on the most important decision-making still lies with the central government and the project officers. For example, the central government of Nepal, through the Department of National Parks and Wildlife Conservation, retains authority in legal issues. All the decisions related to wildlife law are under the control of the government. Moreover, the project officers have the power to amend action plans made by locals. There are no limitations on the extent of the amendments, nor are there requirements that project officers consult affected local groups (Heinen & Mehta, 1999, p. 25). As for the financial structure, there is no procedure in place that requires the project officers to fund village development plans based on local peoples' priorities. The project officers retain the power to sign contracts for tourist-related facilities and to grant permits for businesses to use local resources. Community projects given high priority among local groups have frequently not been those funded (Heinen & Mehta, 1999, p. 25; Mehta and Kellert, 1998, p. 321).

To a considerable degree, ACAP reflects the initiatives and goals of officials, planners or conservation specialists from outside. Yet the local population recognized the benefits they received from the projects and became more supportive of the project's conservation initiatives. The ACAP has been drawing attention as a successful case of local active participation in conservation practices and decision-making on resource management.

Evaluation of ICDPs

It was observed in chapter 3 that early modern protected areas were infused with Western ideas and perspectives. Chapter 4 discussed devastation among local people in non-Western regions due to the implementation of Western-influenced protected area policies. ICDPs were developed after a series of negative effects experienced by non-Western peoples. How do ICDPs differ from protected area policies in the past? Is there any similarity between ICDPs and early modern protected area policies? With the same four themes used in chapter 3, the following section will examine ICDPs. This examination will allow for a comparison of ICDPs with early modern protected area policies, and an evaluation of the characteristics of ICDPs. The four themes are as follows:

1. Do ICDPs reflect the conceptual separation between humans and nature?
2. What is the role of science – natural and social – in ICDPs?
3. How are ICDPs governed?
4. How are ICDPs promoted?

Human-Nature Relationships in ICDPs

When Yosemite Park and Yellowstone National Park were established, people's concern was to satisfy their spiritual and cultural needs with unspoiled natural areas. The human activities were kept away from protected areas as much as possible because human civilization and the protection of nature were considered mutually exclusive (see chapter 3). Over a hundred years have passed, and it is now more acceptable to think that humans and nature can co-exist. ICDPs allow humans to live and to use natural resources within protected areas. In this sense, humans and nature have become closer to each other under ICDPs.

While ICDPs allow humans to live inside protected areas, a rigid conservation standard has to be set in order to keep a certain level of environmental health within protected area boundaries. The level of biological diversity is a new indicator of environmental health used in ICDPs (McNeely et al., 1990, pp. 17-22). The IUCN defines biological diversity as "the degree of nature's variety, including both the number and frequency of ecosystems, species or genes in a given assemblage" (McNeely, 1988, p. 3). The ICDPs in sub-Saharan Africa and Nepal have been implementing a variety of conservation efforts based on this notion of biological diversity. Reducing wildlife poaching is a major concern in the ICDPs in sub-Saharan Africa in order to achieve this

goal of biological diversity (Barrett & Arcese, 1995, p. 1073; Wainwright & Wehrmeyer, 1998, p. 933). Nepal's conservation areas have tried to minimize negative environmental impacts from the development of tourism in order to maintain the level of biological diversity (Mehta & Kellert, 1998, p. 320; Stevens, 1997, p. 249).

This notion of biological diversity is very Western-influenced. The human-nature separation in the Renaissance developed the idea that nature is something to be observed, analyzed, and made rational by humans (Apffel-Marglin, 1996; Ayres, 1998; Norgaard, 1994). Biological diversity conservation requires an individual wildlife species to be quantified, categorized, and managed. This attitude towards nature is one of the main characteristics in Western societies, and is significantly different from the holistic vision of the relationship between humans and nature held by some non-Western peoples (see chapter 2).

Moreover, biological diversity contains a great deal of commercial value in Western societies. The large variety of biological features in protected areas can attract wealthy tourists. The study of species in protected areas that have medicine and other properties is useful for new natural product developments. Many corporations have already begun talks with potential investors about the possibilities of selling biological diversity for a profit (Pimber & Pretty, 1997, p. 325). This approach may also demonstrate that nature, separated from the human mind, is just a commercial commodity, not something of which humans are part.

Co-existence of humans and nature in ICDPs made changes in human-nature relationships. However, the separation between humans and nature is still prevalent in ICDPs: humans and nature are conceptually separate, not necessarily integrated. The

notion of biological diversity itself requires human-nature separation. Biological diversity is based on the quantification and categorization of nature, which necessitates the disengagement of the human mind from nature (see chapter 2). This continued disengagement risks reducing nature to no more than a resource for human profit. Not much change in human-nature relationships has been observed, in this sense, since the beginning of modern protected area development.

Role of Science in ICDPs

In chapter 3, it was discussed that both natural and social sciences played significant roles in the management of early modern protected areas. Those sciences dominate ICDPs as well. As has already been discussed, the levels of biological diversity are the indicators of environmental health within ICDP sites. Since the notion of biological diversity is scientifically defined, it is unavoidable that natural resource management in ICDPs becomes science-oriented. The populations of certain individual species are chosen (reductionism) and measured (positivism), and hunting quotas are set accordingly.

The zoning system Nepal's conservation areas have adopted also retains scientific characteristics. This system divides a conservation area into several pieces, each of which has a different standard for natural resource management. The way boundaries between zones are defined demonstrates the typical characteristics of Western science. Ecosystem indicators are chosen (reductionism), measured (positivism), analyzed (objectivism), and used to draw boundary lines on Nepali lands. This scientific approach is in opposition to holistic approaches to lands taken by many non-Western peoples.

Social science also plays a significant role in ICDPs. One of ICDPs' main goals is to promote local economic development. This has been accomplished by providing communities with alternative income, employment, and new technology, because these factors are important indicators of "growth" defined by economics. It is also economics which evaluates whether or not local people have increased their wealth as a result of project implementation. In this way, many social aspects of ICDPs, such as purposes and methodologies for projects, are dependent on Western social science.

However, the benefits ICDPs offer to communities are not necessarily what local people desire, because the choice of those benefits are all based on economic assumptions made by the West. As Max-Neef (1991, p. 18) points out, there are differences in human needs according to cultures, regions, and historical conditions. Scientific language may be inadequate for describing and understanding all the complex cultures and experiences of local people. Thus, widespread practices of Western sciences in protected areas may lead to the alienation of local cultures. There have been some reports made about the gaps between Western assumptions and the local reality. For example, while Western culture pursues an economic rationale in hunting, many cultures in sub-Saharan Africa view hunting with great non-pecuniary importance because killing animals creates a social identity of a person's bravery, skill, and spiritual merit. Yet, this aspect of local culture has not been taken into consideration when hunting quotas are set by ICDPs (Barrett & Arcese, 1995, pp. 1077-1078; Gibson & Marks, 1995, p. 947). In addition, ACAP has experienced the refusal of new technology by the local population. The project provided fuel-efficient stoves to the communities without knowing that locals were unable to prepare some standard dishes with this new type of stove (Pandey and

Yadama, 1992). ICDPs have demonstrated that sciences based on Western assumptions are not universally applicable.

Both natural and social sciences are dominant in ICDPs, directing natural resource management and economic policies. Yet, it has been observed that the dominance of Western science has sometimes failed to recognize local ways of life. It has been argued that faith in Western science may still undercut the acceptance of other ways of thinking (Pimber & Pretty, 1997, p. 300).

Governing System of ICDPs

One of the ICDP's goals is the shift of decision-making power to local communities so that local people can develop a sense of ownership for the land and become more responsible for their natural resource use. CAMPFIRE and ACAP's transfer of decision-making power to the local communities, led to positive reactions among locals towards the projects. At some of the CAMPFIRE sites, by being granted decision-making on revenue allocation, local people have developed a sense of ownership over wildlife in the area. By seeing wildlife as a source of income, they actively participate in conservation efforts. Local communities at the ACAP site have become able to voice their opinions regarding community development and forest management. Especially in forest management, local management committees have been empowered and are playing a major role in actual regulation enforcement.

Although there have been some changes observed in decision-making processes in ICDPs, the most important decision-making has, however, been kept in the hands of higher authorities. In both CAMPFIRE and ACAP, the governments still hold authority

over legal decisions on conservation issues such as setting hunting quotas. While local communities in ACAP sites have been empowered, the central agency has never abandoned its authority to amend local decisions on development or resource management plans.

Neither LIRDP nor ADMADE has so far implemented any shift in decision-making power. A lack of decision-making shifts in those projects has even caused social disturbance in local communities. In both ADMADE and LIRDP, the higher authorities have hired young local scouts to enforce conservation regulations. These young men, offered an income, a firearm, education and the power to arrest, have challenged their elders and the traditional institutions (Gibson & Marks, 1995, p. 948).

A certain degree of shifts in decision-making power have been observed in some of the ICDPs. However, even if some shift occurs, the most important decisions are still in the hands of technocratic higher authorities. Those authorities are reluctant to give up their ultimate decision-making power. In the Western rationale, technocrats are still the only reliable decision-makers; they prevail in ICDPs, as they did in early modern protected areas.

Promotion of ICDPs

The paradigm of "conservation with development" has attracted increasing support among the international community in recent years. Gillingham and Lee (1999, p. 218) observe a proliferation of projects aiming to integrate human development needs with conservation objectives. Today, CAMPFIRE and ACAP, developed in the mid-1980s, continue to be cited in a wide range of literature as successful examples of such

projects. It is very likely that CAMPFIRE and ACAP have been and will be the models of similar projects, just as Nepal has created two new conservation areas and practiced projects comparable to ACAP (Heinen & Mehsa, 1999, p. 21).

As discussed in chapter 3, Western interests in nature protection and its political dominance resulted in the diffusion of Yosemite and Yellowstone types of modern protected areas worldwide. Are the ways of promoting ICDPs different from those used in the past? In the case of the ICDPs described in this chapter, central governments and Western-influenced organizations contributed largely to the initiation of the projects. In Zimbabwe, the Department of National Parks and Wildlife Management, the Centre of Applied Social Sciences, and the Zimbabwe Trust developed CAMPFIRE. Zambian government agencies and international conservation organization created workshops that helped to initiate both ADMADE and LIRDP programs. Similarly, Nepal's central government suggested to the KMTNC that they develop ACAP (Murindagomo, 1990, p. 124; Gibson & Marks, 1995, p. 941; Lungu 1990, p. 116; Stevens, 1997, p. 244; Brandon & Wells, 1992, p. 559). Why, then, are these governments and organizations interested in ICDPs?

International political pressure and financial supports from international organizations are the major factors that create incentives for ICDP implementation. Environmental conservation that is tied with development has been a persistent theme among a large number of international organizations such as IUCN, WWF, UNDP, and other United Nations organizations. Many international conferences and conventions have given attention to the relationships between poverty and environmental health (Ghimire & Pimbert, 1997, p. 1). The 1992 United Nations Conference on Environment

and Development in Rio is an example of this practice. Correspondingly, a large number of international organizations have invested substantial sums in ICDP types of projects in developing countries. The availability of financial assistance for those projects has been sufficient for the governments of developing countries to initiate ICDPs (Ghimire, 1994, p. 200).

As discussed in chapter 3, once the colonial era ended, European powers began to use subtle political means so that former colonies would keep protected areas within the state boundaries. Those subtle means included international political pressures through the United Nations and the provision of financial aid tied to protected area establishment. This trend continues to exist today. Since Western countries are dominant in today's international arena, Western interests are greatly reflected in the promotion of ICDPs.

ICDPs as a Westernization Tool

The concept of ICDPs differs from that of early protected areas in that ICDPs have allowed local populations to live and use natural resources within the boundaries, and have transferred some decision-making power to local communities. However, the evaluation of ICDPs in this chapter has demonstrated that ICDPs still reflect the same underlying Western values as early modern protected areas. First of all, human-nature separation is still prevalent in ICDPs. The notion of biological diversity, which dominates ICDPs' conservation strategy, is based on the segregation of humans from nature. Secondly, Western scientific approaches play major roles in natural resource management and socio-economic decision-making in ICDPs. Thirdly, the governing systems of ICDPs remain top-down because higher authorities do not give up their

ultimate decision-making powers. Finally, the promotion of ICDPs is often made by Western-influenced organizations and agencies. These four points demonstrate that ICDPs and early modern protected areas are very similar in many ways. A variety of problems caused by early protected areas resulted in the development of ICDPs. However, the essential characteristics of protected areas in the past are still prevailing in current protected areas.

Most of the literature on ICDPs has concerned whether projects are effective in achieving conservation goals. Natural scientists continue to measure the numbers of wildlife in protected areas and use these figures to assess the environmental health of the areas. Social scientists focus on the amount of conservation support that projects have gained from local populations. This research direction reveals that the main objective of ICDPs is the conservation of biological diversity not community development. In order to achieve their conservation goals, social scientists observe, analyze, and explain rationally all the social circumstances in indigenous communities, and try to indicate solutions for improvements. Sets of recommendations proposed by scientists after their thorough research on local systems and cultures will be used by ICDP decision-makers who would develop better policies to obtain the project's goal of nature conservation.

Scientists' major critique of ICDPs is that community development has not always been effective as a means to promote local conservation efforts. Many argue that vague linkages between conservation and economic gains failed to motivate locals to participate in the projects (Gibson & Marks, 1995, p. 952; Wainwright & Wehrmeyer, 1998, p. 938; Wells & Brandon, 1992, p. 567). For example, Gibson and Marks (1995, p. 947) criticize ICDPs' skewed distribution of economic benefits in local communities

because it can only create incentives for conservation among limited numbers of people. Meanwhile, they also argue that the provision of public goods such as infrastructure development is insufficient because public goods do not reward individuals' participation in conservation activity (p. 951). The projects' ill-conceived and untested assumptions about indigenous societies are also considered problematic. For example, Wainwright and Wehrmeyer (1998) discuss that ICDPs often overlook the different economic needs of different social groups, resulting in failure to motivate local people for conservation. As discussed in the earlier section of the chapter, ICDPs' negligence over local people's non-precuniary values in hunting and foraging is also one of the criticisms (Barrett & Arcese, 1995, p. 1077; Gibson & Marks, 1995; p. 941).

Increased numbers of ICDPs, or projects similar to ICDPs, are practiced in today's protected areas and a variety of efforts are being made to improve the effectiveness of those projects. However, ICDPs are greatly influenced by Western values and systems. Therefore, possible costs created by ICDPs have to be carefully examined. Does the diffusion of ICDPs not cause the spread of Western cultures worldwide? Does the attempt to gain local support for ICDPs not mean the manipulation of local peoples to become supporters of Western values and systems? If so, what are the consequences? The implementation, practice, and eventual acceptance of ICDPs in various areas may in fact simply further assimilate non-Western cultures into a Westernized system.

Chapter 6: Do Modern Protected Areas Support Cultural Survival?

What does the imposition of a Western-influenced system on other cultures mean to the people of the influenced society? As observed in the previous chapters, modern protected area policies have evolved over the years, and have recognized the importance of local inhabitants' participation in conservation management. However, as approved conservation projects in today's protected areas, ICDPs are still very much Western-influenced. Therefore, the promotion of local participation means inculcating indigenous peoples in Western systems. This chapter will discuss the kind of negative impacts Western ICDPs may have on indigenous societies. Comparing ICDPs with colonial policies under indirect rule, it will be argued that ICDPs will slowly erode indigenous cultures and lead to the loss of world cultural diversity.

Direct and Indirect Rule

In the early nineteenth century, the expansion of colonial administration was pursued mainly through two approaches: direct and indirect rule. Direct rule, which originated from French colonial theory, tried to obtain control over local populations as rapidly as possible by replacing local social structures with those of the French civilization (Bodley, 1990, p. 70; Crowder, 1968, p. 167; Glassner, 1993, p. 283; Hallett, 1974, pp. 315-317). In 1920s West Africa, for example, the French colonial administration dismissed African traditional social structures as irrelevant to their aims. They transformed traditional political units into newly-created districts, abolished local political institutions, and delegitimized the authority of tribal officials and chiefs

(Crowder, 1968, p. 175; Hallett, 1974, p. 315). Meanwhile, the French desired the fast development of an educated, acculturated local elite as new leaders, who would be loyal to the French (Crowder, 1968, p. 175; Glassner, 1993, p. 283). The French direct rule was an aggressive assimilation policy with no allowances made for incompatibilities between local socio-political organizations and the French administration (Bodley, 1990, p. 70; Crowder, 1968, pp. 166-171; Hallett, 1974, pp. 315-317).

French direct rule, however, became widely condemned by other colonial authorities as being too intolerant of tribal customs, thereby disrupting, weakening, and exterminating tribal societies. By the 1930s, indirect rule, promoted by English colonial administrators, came to be widely accepted as an alternative (Bodley, 1990, p. 71; Hallett, 1974, p. 317). This involved preventing the collapse of local social order by maintaining and strengthening traditional political structures. Under indirect rule, tribes, tribal councils, clans, and villages were generally recognised as legal entities, and it was assumed that tribal peoples would thereby be allowed to develop along their own lines. "Grown from within" was one of the key philosophical concepts behind indirect rule, as it encompassed this notion of preserving existing socio-political structures (Bodley, 1990, p. 71; Crowder, 1968, p. 211).

However, the question is, for what purpose or toward what direction were local communities supposed to "grow from within"? Indirect rule's goal was not decolonization; it was to obtain better political control of the local population and to pursue the colonizing powers' interests by minimizing the social disturbance in the communities (Bodley, 1990, p. 71; Crowder, 1968, p. 211-217; Hallett, 1974, p. 311-317). Indeed, this new approach preserved local political structures only to the extent

necessary to maintain local social order. A typical example of indirect rule in operation was the system of local administration in pre-independence Kenya. Indirect rule vested local authority in headmen or councils of elders who were selected by the local people. Headmen were salaried and were given wide powers to maintain order and see that government regulations were carried out in the local area. The local authority, however, was subject to the recommendations from the white District Commissioner and the final approval of the colonial governor (Bodley, 1990, p. 71; Hallett, 1974, pp. 584-586).

Under indirect rule, anthropologists played a significant role in controlling tribal societies. In order to develop the most effective and efficient policies, colonial governments depended on the data or reports provided by anthropologists working under government supervision or with the support of national and international research institutions (Bodley, 1990, p. 74). The use of anthropological knowledge helped colonial governments to manipulate local populations well enough to successfully achieve their own goal of colonization. As Bodley (1990, p. 72) observed, indirect rule was direct rule by indirect means. The use of anthropology was an effort to minimize damages to tribal societies while supporting imperialist expansion into tribal areas.

Indirect rule evolved from, and supposedly differed from, direct rule. However, the goal of the two approaches was the same: they both pursued the modifications of local societies into more efficient units to ensure effective resource exploitation by European powers. The only difference between the two was the speed; indirect rule took longer to transform tribal societies. Yet, imperialist expansion, detribalization, and Westernization in colonies occurred either way (Bodley, 1990, p. 72; Crowder, 1968, p. 169; Glassner, 1993, p. 284).

ICDPs and Indirect Rule

The analysis of ICDPs in the previous chapter observed some similar political strategies to those pursued by colonial indirect rule. The comparison of ICDPs and indirect rule will help to further investigate the characteristics of ICDPs.[4] First, both ICDPs and indirect rule approaches were born as an alternative to conventional coercive policies. In both cases, after seeing social disturbance in local communities as a result of the previous coercive policies, human rights issues were addressed. As a result, the approaches had to be shifted toward something more humane. Ineffectiveness in the conventional administration due to social disturbance was also an impetus to the shift. ICDPs and indirect rule, as new strategies for better administration, resulted in recognizing or using local social structures. ACAP in Nepal employed the traditional forest management committees for more effective natural resource management, and the indirect rule in pre-independence Kenya exercised the tribal councils for a more competent political administration.

Second, despite the apparent power shift, the most important decision-making power is and was in the hands of a higher authority both in present ICDPs and colonial indirect rule. In both ACAP and Zimbabwe's CAMPFIRE, the most important decisions relating to wildlife management, such as hunting quotas, are still in the hands of the governments in spite of significant local empowerment in some of the communities. In Kenya under the colonial administration, the local authority was always subject to the colonial governor's decisions.

[4] Based on a review of existing academic literature, the term indirect rule has apparently not been linked with modern protected area policies.

Third, in both cases, social scientists play a major role in developing administrative policies. Every year, many policy analysts go to ICDP sites, such as villages in the Annapurna region, interviewing the locals and creating data. In Kenya's case, many anthropologists visited local villages to create reports which were used by the colonial government. In both cases, dominant powers, such as international conservation agencies and colonizers, use such researchers' work for the development of more effective approaches to achieving their own goals. The intention of both ICDPs and policies under indirect rule is to manipulate local peoples or systems, so that the outside agencies can attain their goals and avoid conflicts with the local population.

Progress and Protected Areas as Universal Goals

One of the main reasons why colonial governments using indirect rule retained their decision-making power and tried to manipulate local communities was that the governments' actions were justified as altruistic deeds (Blaut, 1993, pp. 15-16; Hallett, 1974, p. 311). As discussed in chapter 2, the colonizers' goal was progress through resource exploitation, which was considered beneficial to all societies. The social advantages of progress defined in Western society were thought to be positive, "universal" goods, to be obtained at any price. (Blaut, 1993, pp. 14-17; Bodley, 1990, pp. 11-15; Norgaard, 1994, p. 1). It was this ethnocentric notion, though well-justified among Western countries, which resulted in the spread of colonization worldwide and the neglect of other values and cultures.

The way in which modern protected areas spread is similar to how colonization proceeded, namely, that shared political interests among Western societies were the

major force behind the increase in numbers of protected areas. These political interests behind protected area establishment have changed throughout the years. At first, the recreational use and monumental values of natural areas led to the promotion of protected areas. Later, protected areas became a means of wildlife conservation and local economic development. However, regardless of intended aims, protected areas have continued to spread world-wide because those aims have been well-justified among the initiators (see chapter 5).

Do Modern Protected Areas Support Cultural Survival?

European powers have integrated and assimilated remote tribal communities through colonization. What are the potential outcome of diffusing Western-influenced modern protected areas around the world? Table 2 shows the similarities between colonization and modern protected area practices. Although the goals of colonization and modern protected areas are different, these two practices have many characteristics in common. Chapter 2 discussed the colonial goal of progress originating with the separation of human minds from nature in the Renaissance. As examined in chapter 3 and 5, human-nature separation has been prevalent in modern protected areas since their initial development. Both the notion of progress and the management of modern protected areas have had a strong base in Western sciences. Faith in sciences justified and created technocratic governing systems in both colonial policies and modern protected areas. Moreover, both colonization and modern protected areas have spread worldwide as a result of political dominance by the West.

Table 2. Characteristics of Colonization and Modern Protected Areas

Characteristics	*Colonization*	*Modern Protected Areas*
Original Form	Direct rule	Yosemite, Yellowstone model
New Form	Indirect rule	Integrated Conservation-Development Project (ICDP)
Goal	"Progress" through exploitation of resources	Nature protection for recreation, wildlife conservation, or maintenance of biological diversity with local economic development
Human-Nature Relationships	Separation between humans and nature	Separation between humans and nature
Roles of Sciences	Dominant in management	Dominant in management
Governing Systems	Technocratic governance	Technocratic governance
Promoters	Western countries	Western-influenced organizations
Outcome of the Practices	Westernization Loss of cultural diversity	Westernization? Loss of cultural diversity?

Both direct and indirect rules successfully led to the initiators' goal of colonization, resulting in detribalization and/or Westernization. Will Western-influenced modern protected area practices achieve the goal of nature protection without Westernizing local cultures? The answer is likely to be "no." When so many characteristics are shared by both the colonial practices and modern protected area policies, it is hard to believe that the outcome of modern protected area policies, even with the current ICDPs, will be something very different. As indirect rule slowly eroded tribal cultures, ICDPs will likely continue to weaken non-Western cultures and practices.

The IUCN's Principles and guidelines on indigenous and traditional peoples and protected areas (1999, p. 2) states that "where indigenous peoples are interested in the conservation and traditional use of their lands, territories, waters, coastal seas and other resources, and their fundamental human rights are accorded, conflicts need not arise between those peoples' rights and interests, and protected area objectives." Conflicts

between local peoples and protected areas may be avoided, but only through effective manipulations of local populations. However, this approach will enhance Westernization of remote, local cultures, resulting in threats to world cultural survival.

Chapter 7: Protected Areas for Cultural Survival

Since today's modern protected areas are still infused with Western values and interests, they are likely to gradually erode non-Western cultures. However, some local groups are currently struggling to defend their cultures within protected areas. These peoples include the Miskito in Nicaragua, the Kuna in Panama, and some aboriginal peoples in Australia (Clay, 1991, p. 261; Dasmann, 1991, p. 11; Stevens, 1997, p. 281). Among those peoples, this chapter will focus upon the Miskito's struggles to establish a community-controlled protected area on their territory. The Miskito have resisted Western control of their land, which had once become an ICDP model of protected area, and created their own protected area for the sake of the right to self-determination (Nietschmann, 1997). By examining the process by which the Miskito established the self-controlled protected areas, this chapter will seek the possibility of creating protected areas controlled by indigenous peoples for their cultural survival. The examination of a dispute between the Miskito and international conservation agencies will clearly illustrate differences in interests between the two parties. These differences will suggest the keys to developing protected areas for the cultural survival of indigenous peoples.

Self-Determination and Cultural Survival

As previous chapters pointed out, the imposition of ICDPs would possibly be a great threat to the survival of non-Western cultures because Western-influenced ICDPs are externally motivated political actions which may prevent local peoples from pursuing their own economic, social and cultural development. In order to strengthen and defend

one's own culture, it is important to have the right to determine one's own destiny. This right to "be free to rule one's self, and not be ruled by others" is called the right of self-determination (Dodson, 1994, p. 26).

Today, self-determination is considered essential to human rights. The United Nations states:

> The effective exercise of a peoples' right to self-determination [is] an essential condition or prerequisite . . . for the genuine existence of other rights and freedoms. Only when self-determination has been achieved can a people take the measures necessary to ensure human dignity, [and] the full enjoyment of all rights, . . . without any form of discrimination. Human rights and fundamental freedoms can only exist truly and fully when the right to self-determination also exists. (UN publication specific reference, quoted in Dodson, 1994, p. 23)

Increased numbers of indigenous peoples from all over the world have recently made it clear that the right to self-determination is the most fundamental of their rights as peoples (Wilmer, 1993, p. 7). Michael Dodson, the Aboriginal and Torres Strait Islander Social Justice Commissioner states that "[a]t a most pragmatic or instrumental level, the enjoyment of the right to self-determination is essential to our survival as peoples" (Dodson, 1994, p. 24).

Protection of Nicaraguan Coastal Environment

The Miskito in Nicaragua are one of those indigenous peoples who have voiced their right to self-determination. Upon the establishment of a protected area on the Miskito territory, a dispute began between international conservation agencies and the

Miskito over the right to be the legitimate protected area manager. The following section will examine this dispute, which will clearly illustrate differences in interests between the two parties. This section will be entirely based on Nietschmann's (1997) literature.

Approximately 100,000 Miskito people occupy 1,000 km of western Nicaraguan coastline, and lived from the supplies within their land-sea territories. For the Miskito, the sea is something predictable, known, and essential to their living. However, they do not manage the species or the sea; they try to manage fishers who use the ocean. The Miskito's cultural norms and values are used to guide, instruct, and govern, and to determine who can or cannot enter the sea. The word *laka* means law or custom; *tasba laka* means the Miskito way to live; *kabu laka* means the Miskito customary way to live with the sea. The behavior of the entire community has been guided by these community-based ethics.

The Miskito have also believed in their right to use the sea and their responsibility to defend and protect it. Therefore, they have denied any non-Miskito jurisdiction over their sea territory. However, starting in the late 1970s, their territory began to be intruded upon by foreign commercial fishing fleets and drug traffickers. As a result, the communities allied with the central government and international conservation NGOs, in order to defend their territories from the invaders. In 1991, the Miskito Coast Protected Area (MCPA) was established following a trilateral agreement among twenty-three coastal Miskito communities, Nicaragua's Ministry of Natural Resources and international conservation NGOs. This trilateral agreement was to designate the Miskito territory as a community-controlled protected area, with the central concept being that the

coastal Miskito communities were the legitimate managers of the coastal marine ecosystems.

The communities' control of the protected area, however, was soon taken over by the government and conservation organizations after the communities signed the agreement. The government, without consulting the communities, modified the proposed boundaries and shape of the protected area, which would enable commercial fishing to be practiced more easily. For the Nicaraguan government, marine species are seen as products for export. International conservation agencies such as the Caribbean Conservation Corporation, Nature Conservancy, and WWF took over the research, planning and management of the protected area. They focused on the protection of marine biodiversity, instead of assisting the Miskito's subsistence activities. They blamed the communities for the decline in marine life and proposed that MCPA be a Biosphere Reserve zoned into an absolutely protected core area, surrounded by a buffer area where the Miskito would fish. The external management plans denied the Miskito's control over the protected area. A "community-based" protected area turned into an "on-behalf-of-community" protected area controlled by higher authorities such as the government and international conservation agencies.

The threat to territorial rights led the Miskito communities to take defensive actions. Despite the attempted takeovers by the central government and international conservation agencies, the Miskito communities had many advantages. They are the majority people in the region, with more than 90 percent of the population in the new Miskito-governed North Atlantic Autonomous Region.[5] They also have a history of

[5] The Miskito-governed North Atlantic Autonomous Region is one of two autonomously governed regions won as a 1987 concession from Nicaragua's Sandinista government (Nietschmann, 1997, p. 208).

maintaining control over their land-sea territory during half a millennium, fighting eleven successful defensive wars against invasions from the Spanish colonialists to the Sandinista revolutionaries. After reviewing the status of MCPA, the Miskito decided to ban those international conservation agencies from their communities. They also requested that the Indian Law Resource Center, the activist legal assistance NGO in Washington, D. C., help them to pursue their indigenous rights and self-determination. The communities mapped their reefs and sea tenure area in order to prove that the area traditionally and historically belonged to the people. Subsequently, they have independently created their own protected area, with almost no external funding, naming the Miskito Community Protected Territory (MCPT), a large community-defended and -controlled coastal ocean territory.

The concept of the protected territory is to maintain the communities' land and sea environments, while strengthening the communities' self-determination and using local systems, knowledge, skills, and people. The Miskito's goal is to produce a Miskito-based solution to the management of their sea territory. Their approach to the marine environment greatly differs from Western resource management. For the Miskito, the sea is something to live with, not to control. Instead of controlling the sea, the Miskito control people's behavior through their traditional ethics.

Meanwhile, the Miskito are willing to use Western scientific knowledge in addition to their own environmental knowledge. The communities have invited research from outside for the sustainable use and protection of the ecosystems, as well as initiating and developing conservation projects such as mapping, resource inventories, and monitoring with the help of Western scientific knowledge. Using all the tools available,

the Miskito have been attempting to find the best solution to the protection of the marine environment.

Protected Areas for Cultural Survival

Table 3 contrasts MCPT and the MCPA which was taken over by international conservation agencies. The MCPA approach, led by outside agencies, retains all the characteristics of conventional modern protected areas introduced in the earlier chapters (see table 2). MCPA, promoted by Western-influenced organizations, focuses on the maintenance of biological diversity through the Western science-based, top-down management. In contrast, MCPT has been created in order for the Miskito to pursue their

Table 3. Characteristics of the Miskito Coast Protected Area (MCPA) and Miskito Community Protected Territory (MCPT)

Characteristics	***Conventional Modern Protected Areas (Yosemite, Yellowstone, ICDPs)***	***Protected Areas for Cultural Survival***
	International conservation agencies' Miskito Coast Protected Area (MCPA)	*Miskito Community Protected Territory (MCPT)*
Goal	Nature protection for biological diversity	Local self-determination over the sea territory
Human-Nature Relationships	Separation between humans and nature	Reciprocal relationship between humans and nature
Roles of Sciences	Dominant in management	Assisting local traditional-knowledge-based management
Governing Systems	Technocratic governance	Community-based governance through traditional ethics
Promoters	Western-based conservation agencies	Local communities
Outcome of the Practices	Westernization loss of cultural diversity	Possible reaffirmation of indigenous cultures, values, knowledge, and resource management

right of self-determination over their territory. Western science is effectively used to support the traditional resource management practiced by Miskito people. Moreover, the most significant aspect of MCPT is that all the conservation actions in MCPT have been initiated, organized and decided, using local knowledge and people.

The examination of the MCPT approach suggests the principles of protected areas managed for cultural survival. Protected areas sensitive to local cultures should be initiated and owned by the communities themselves, "working with what they have, with what they know, and what they can do" (Nietschmann, 1997, p. 223). Protected areas for cultural survival are not about community participation in externally-driven marine management or conservation programs, but about local community control of land management in which outsiders may be invited to participate.

Those Western-originated conservation projects such as "community-based management," "joint-management," "co-management," "participatory local management," and "management partnerships" reflect Western interests and needs, often at the cost of local communities' interests. As seen in the previous chapter, many protected area projects now seek local participation while maintaining the colonial, top-down approach where Western "specialists" continue to be the ultimate decision-makers in management. Nietschmann (1997, pp. 214-216, 223) points out that this is because the people in most international organizations remain trapped in the old colonialist ways of thinking about non-Western peoples and their resources, and because conservation project funding often comes from the West, steeped with Western ideology. The Miskito's experiences suggest that only when communities independently take action to defend their territory, are the communities' interests reflected in protected areas. The

Miskito's case suggests the following ways to promote protected areas for cultural survival:

1. Indigenous peoples should be responsible for their lands and should take their own action to defend them.
2. Indigenous peoples should try to protect their lands and cultures with what they have, what they know, and what they can do.
3. Protected area management should be based on local indigenous knowledge.
4. Protected area decision-making should be in the hands of local indigenous peoples.
5. Protected areas should be initiated and justified by those who live in the areas.
6. Western researchers should respect indigenous peoples' knowledge and decision-making, and give suggestions only when requested by indigenous peoples.
7. Western agencies should recognize that indigenous peoples' approaches to environmental conservation or economic development may be different from those of the former.
8. The international community should recognize those protected areas initiated by indigenous peoples.

Chapter 8: Conclusion

Modern protected area policies have evolved since their initial development over a hundred years ago. At first, they strictly enforced regulations based on the idea that human and nature could not coexist. However, this coercive approach resulted in life-threatening hardships experienced by indigenous peoples residing near protected area boundaries. Moreover, a lack of support by indigenous populations for protected areas led to enhanced environmental degradation within protected areas. Early modern protected areas not only failed to recognize the human rights of indigenous populations, but also failed to meet their own goal of nature protection. After learning from the mistakes in the past, a new type of project called ICDP began to be implemented in modern protected areas. ICDPs have attempted to combine environmental conservation with local economic development in order to gain support from local indigenous populations and to manage protected areas more effectively.

The analysis in this thesis demonstrates that despite the changes in approaches, the characteristics of protected areas at the conceptual level have remained the same. Their characteristics have always been infused with Western ideas, reflecting Western values. Thus, the spread of modern protected areas has still meant the diffusion of Western values and systems around the world. As in the process of colonization, indigenous systems around the world have been replaced by Western systems. The introduction of the dominant Western culture to other cultures through colonialism and modern protected areas has eroded indigenous cultures, thus resulting in the loss of world cultural diversity.

The examination of ICDPs has questioned the meaning of "community participation." One of the main goals of ICDPs is to promote local people's participation in protected area management. ICDPs may involve community committees to determine which families should benefit or which individuals should be employed by the projects. However, the "participation" is often within the limits determined by the project. As discussed in chapter 6, this type of participatory technique was found in indirect rule practiced by progressive colonial administrators in the 1920s and 1930s. The intention of this indirect rule was to use local systems in order to manage local communities so that conflicts between the communities and colonial administrators would be minimized. Similarly, ICDPs have been used as tools to control and manage local communities in order to avoid conflicts and to achieve the goal set by Western-influenced organizations. The practices of both ICDPs and indirect rule are "community management" so Western societies can still reach their goals, rather than real self-determination by local populations. They are both externally motivated political actions that involve the transfer of Western materials, money, knowledge, and values to local communities.

True participation is about power which leads to community empowerment; it should not be confused with community management. Actions made by the Miskito in Nicaragua have demonstrated this true participation (see chapter 7). They have insisted on their right to self-determination in their territory and their right to manage the natural environment based on their knowledge and values. The Miskito have created MCPT, their own protected area, with what they have, what they know, and what they can do. Community empowerment begins from such community-initiated political actions.

Growing public concern over global environmental problems has stressed the necessity of international co-operation in global environment management. Abundance and mobility of information make it easier to communicate between peoples from different parts of the world and to enable them to collaborate on environmental problems. However, collaboration does not mean that the world has to take a single strategy to deal with the problems. The common goal can and must be achieved through diverse approaches taken by diverse peoples.

As discussed in chapter 2, increased numbers of researchers and scholars have argued that there is "an inextricable link between biological and cultural diversity" (IUCN, 1997, p. 30). In order to avoid further loss of cultural – and therefore linked biological – diversity, protected area policies should pursue self-determination of indigenous populations within protected areas. This requires that land claims be legally recognized and that local communities be provided with effective control over the natural resources contained in protected areas. The concept of indigenous-owned protected areas such as that of the Miskito has been a very recent development. It is hoped that the Miskito protected area will be successfully managed and controlled by the Miskito, and that more and more indigenous peoples will follow these efforts, for the sake of cultural and biological diversity in the world.

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